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Andrews University

School of Education

TEACHER PERCEPTIONS OF INTERNET-BASED
DISTANCE EDUCATION IN ADVENTIST
COLLEGES AND UNIVERSITIES:
A MIXED-METHODS STUDY

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Susan B. Smith

November 2004

UMI Number: 3153197

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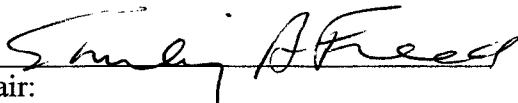
TEACHER PERCEPTIONS OF INTERNET-BASED
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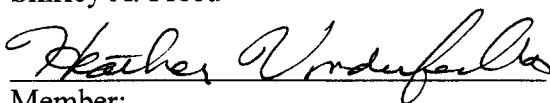
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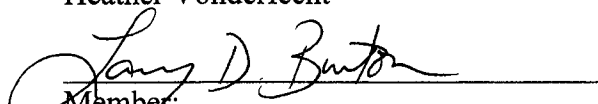
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To Bobby, Rachel,
Stephanie, & Michael-
Thank you for your patience.

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LIST OF ABBREVIATIONS

ADEC	Adventist Distance Education Consortium
AVLN	Adventist Virtual Learning Network
CDB	Course Development Benchmarks
CSB	Course Structure Benchmarks
EAB	Evaluation and Assessment Benchmarks
FSB	Faculty Support Benchmarks
ISB	Institutional Support Benchmarks
IBDE	Internet-based Distance Education
IHEP	Institute for Higher Education Policy
NAD	North American Division
NCES	National Center for Educational Statistics
SPSS	Statistical Package for Social Sciences
SSB	Student Support Benchmarks
TLB	Teaching/Learning Benchmarks

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ABSTRACT

**TEACHER PERCEPTIONS OF INTERNET-BASED
DISTANCE EDUCATION IN ADVENTIST
COLLEGES AND UNIVERSITIES:
A MIXED-METHODS STUDY**

by

Susan B. Smith

Chair: Shirley A. Freed

ABSTRACT OF GRADUATE STUDENT RESEARCH

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Title: TEACHER PERCEPTIONS OF DISTANCE EDUCATION IN ADVENTIST COLLEGES AND UNIVERSITIES: A MIXED-METHODS STUDY

Name of researcher: Susan B. Smith

Name and degree of faculty chair: Shirley A. Freed, Ph.D.

Date completed: November 2004

Problem

An examination of Internet-based distance education (IBDE) is important in order to maintain the delivery of quality higher education and to encourage the systemic adoption of policies and practices that promote excellence in IBDE. The quality of online distance education will increasingly become the standard by which students choose a program as their educational options have multiplied with the dramatic growth in distance education.

Method

This was a sequential exploratory mixed-methods study of the perceptions of teachers on IBDE. It was conducted collaboratively with Pamela Cress who examined administrator perceptions. Data were collected for both studies from teachers and

administrators at nine Adventist colleges and universities across the United States.

Research participants were first surveyed using an electronic version of the Institute for Higher Education Policy (IHEP) benchmarks. Some of the IHEP benchmarks are faculty-controlled (i.e., course development, teaching/learning, course structure) and others are institutional-controlled (i.e., institutional support, student support, faculty support, evaluation and assessment). The survey was followed by a qualitative phase that involved telephone interviews with one identified expert in IBDE on each of the nine campuses.

Results

Teacher and administrator perceptions varied little in regard to performance on the IHEP benchmarks. However, it was found that the most problematic areas of the benchmarks were institutionally controlled. In the qualitative phase, the themes of prevailing attitudes, collaboration, and qualities of an expert emerged in addition to the seven-benchmark categories. The respondents expressed that IBDE was important, and future plans were to increase offerings. Findings that were statistically significant were gender perceptions and the combined effect of experience and position. It was found that mid-level administrators with online teaching experience identified more strongly with leadership roles than teachers or administrators.

Conclusions

Issues affecting faculty members that require the greatest attention include: remuneration; allocation of time for professional development; faculty support; and pedagogy development. Greater institutional commitment is needed in: visioning and strategic planning; student and faculty support; and evaluation and assessment. Future

research recommendations involve teaching theory and methods, faculty support, loading and remuneration, gender differences, and testing and revision of the IHEP benchmarks.

CHAPTER ONE

INTRODUCTION

The purpose of this chapter is to provide information on the background of the problem, a review of Adventist educational organizations, and an introduction to the study. The chapter additionally includes: the purpose of the study, research questions, limitations, delimitations, definitions of terms, and the significance of the study.

Background of the Problem

Although higher education has remained virtually unchanged for centuries, it has been suggested that it is currently facing a crisis of modernization (Evans & Nation, 2000) due to the impact of the Internet and the World Wide Web. Distance education defined as education that occurs when teacher and students are not located in the same place has embraced and integrated changes in structure and pedagogy as educational technologies have advanced. The question remains, however, whether traditional brick and mortar colleges and universities can experience future success without distance education. The next decade will be a time of transformation for higher education as it responds to the challenges of a world changed by technology (Duderstadt, 1999).

Eaton (2001) suggests that whether or not distance education means the end of traditional higher education or simply a commanding new addition, it is currently making a major impact on higher education. Distance education is challenging models of

teaching and learning, changing the way faculty members function, and spawning new institutions of higher education as well as distance education programs on traditional campuses (Eaton, 2001).

In its second comprehensive report, the National Center for Educational Statistics (NCES) found considerable growth in the field of distance education (Lewis, Snow, Farris, & Levin, 1999). Key findings of the 1997-1998 NCES report (Lewis et al., 1999) include enrollment in an estimated 1.6 million distance education courses in over 54,000 different course offerings. NCES also found that since their first survey in 1994-1995 there has been an increase in the number of higher education institutions offering distance education from 33% to 44%. Course offerings and enrollment nearly doubled, as did degree and certificate programs. Of particular interest to this study, NCES reported the use of Internet-based and video technologies as the most utilized technologies in distance education. When the NCES (*The Condition of Education 2001*, 2001; Lewis et al., 1999) survey asked institutions about their projected plans for distance education over the next 3 years, 82% reported plans to use or increase the use of asynchronous Internet instruction as the primary method of delivery. Additionally, 60% reported plans to use or increase the use of synchronous Internet-based instruction. If institutional planning has proceeded as indicated by the NCES report, the past 5 years have likely been characterized by the rapid adoption of Internet-based instruction as the primary means of distance education delivery.

What is stunning about the impact of distance education on higher education is not necessarily current enrollment, but rather the unprecedented rapid growth that has been experienced in a relatively short period. As higher education rushes to catch up with

the distance education movement, the response in many instances has been somewhat disjointed and disorganized (Moore & Kearsley, 2005). Moore and Kearsley (2005) suggest that a systems view to distance education will help academic institutions and instructors recognize and deal with challenges, as well as identify quality distance education.

A systems view recognizes the interdependence of individual parts to the health of a whole system including the environmental context of the system (Bertalanffy, 1968). This suggests that a change in one part of the system will affect the whole system. A systems model of distance education as described by Moore and Kearsley (2005) includes these components: learning, teaching, program/course design, and management. Additionally, the systems environmental context is influenced by organizational history, culture, and philosophy. When viewed from a systems model, there are numerous challenges to be addressed and mysteries to be uncovered in distance education as a whole, and in Adventist higher education in particular.

Some of the major issues facing higher education's involvement in distance education are: the changing roles of instructors, the need for shifting in administrative focus, a new view of the student body, having the ability to distinguish and develop high-quality distance education courses and systems, providing adequate user support, and financial planning (Eaton, 2001).

As the Internet replaces the classroom, the role of the teacher is fundamentally altered, presenting faculty with the need for a pedagogical paradigm shift. Not only is the role of the instructor changed in terms of the teaching and learning process, but also in many distance education models teachers are sub-specializing in such areas as content

expert, design, production, and student interaction (Eaton, 2001; Moore & Kearsley, 2005).

Electronic learning environments are changing the way colleges and universities educate students, and higher education administrators struggle to strategically plan the most appropriate strategy for distance education (Oblinger, Barone, & Hawkins, 2003). Some authors suggest that in order for technology to really work for all students and faculty, there must be an institutional commitment to a comprehensive, clearly articulated technology plan that achieves student learning, productivity, and cost effectiveness (Hitt & Hartman, 2003).

Traditional policies and practices in higher education are often inappropriate or inadequate, and administrators are finding it necessary to reshape old policies and/or make new policies for an effective distance education program. For instance, the intellectual property law raises the new issues of patent, copyright, and software infringement, as well as old issues of institution trademark. Federal policies on student financial aid and issues of access for persons with disabilities may also impact the expansion of distance education. In addition, institutions may need to modify faculty policies on workload, class size, and remuneration. Additional considerations involve the impact that distance education courses and degree programs will have on state and regional accreditation (Levine & Sun, 2002; Oblinger et al., 2003).

Other internal barriers include faculty resistance to distance education, assessment of program effectiveness, financial expense for technological infrastructure including servers, hardware/software, learner support services and faculty, and course development support (Hitt & Hartman, 2003).

In light of the challenges described above, some higher education institutions are forming partnerships with other institutions to achieve the goal of quality distance education (Eaton, 2001). Katz, Ferrara, and Napier (2003) describe the nature of these partnerships as follows:

Partnerships allow organizations to share risk, take advantage of one another's strengths and expertise, pool resources, and spark creativity. Given the complexities of a large-scale distributed education program, few institutions will make significant enrollment gains by going it alone. (p. 17)

These partnerships are as varied as the institutions and are usually considered as a way to assure: (a) program quality and/or cost reduction; (b) access for additional students in current academic programs; and (c) growth and academic innovation by providing new programs that serve new students (Katz et al., 2003).

Distance Education in North American Adventist Higher Education

Adventist education has recently produced several organizations concerned with issues of distance education and the use of educational technology. The Technology and Distance Education Committee K-12 (TDEC) is responsible for providing research findings, policies, guidelines, resources, and evaluation for distance education and the use of instructional technology for Kindergarten to 12th-grade (K-12) Adventist schools. Adventist Education Forum is an online discussion board for Adventist teachers. The Seventh-day Adventist Curriculum and Instruction Resource Center Linking Educators (CIRCLE) is an online site providing comprehensive information for SDA educators. Adventist Virtual Learning Network (AVLN) is a grassroots volunteer educational organization focused on the promotion of online collaboration for life-long learning and integrating faith and learning. The Adventist Education Net serves the North American

Division (NAD) Adventist Church by giving guidelines and policies to more than 1,000 K-12 schools and 15 colleges and universities in North America.

The only Adventist educational organization which focuses exclusively on distance education in higher education in the NAD is the Adventist Distance Education Consortium (ADEC). This consortium's membership involves the collaboration of 13 out of the 15 SDA colleges and universities located throughout North America. These institutions include: Andrews University, Atlantic Union College, Canadian University College, Columbia Union College, Griggs University, La Sierra University, Loma Linda University, Oakwood College, Pacific Union College, Southern Adventist University, Southwestern Adventist University, Union College, and Walla Walla College. Florida College of Health Sciences and Kettering College of Medical Arts are Adventist institutions of higher education that are not members of ADEC.

The mission of ADEC is to encourage collaboration and cooperation in the development, promotion, and delivery of quality Christian distance education at the college and university level. Out of the 15 institutions of North American Adventist higher education, only 9 were actively providing Internet-based courses and or/degree programs when data were being collected in 2003-04. This dissertation focuses on the quality of Internet-based distance education in these nine institutions: Andrews University, Atlantic Union College, Florida Hospital College of Health Sciences, Kettering College of Medical Arts, La Sierra University, Loma Linda University, Pacific Union College, Southern Adventist University, and Walla Walla College.

Statement of the Problem

Internet-based distance education is fast becoming an integral part of course delivery to the North American Division Adventist colleges and universities. Currently, there are no comprehensive studies of online education in Adventist colleges and universities to inform administration and faculty on policies and practices that reflect industry standards of quality. An examination of Internet-based education is important in order to maintain the delivery of quality higher education and to encourage the systemic adoption of institutional and instructional policies and practice that promote excellence in Internet-based distance education. The quality of online distance education will increasingly become the standard by which students choose a program as their educational options have exponentially increased with the dramatic growth in distance education course offerings. An examination of Internet-based distance education in Adventist colleges and universities may help to highlight models of best practice and draw attention to areas for continued growth. Since online instruction is not bound by geography, an educational system must grapple with issues of collaboration versus competition through research and strategic planning.

Purpose of the Study

In the study *Quality on the Line: Benchmarks for Success in Internet-based Distance Education* (2000) the Institute for Higher Education Policy (IHEP) developed a set of benchmarks that are essential to high-quality Internet-based distance education. These benchmarks address quality that is controlled by the institution (those beyond the scope of direct faculty) as well as the instructor (benchmarks that are within the direct control of the instructor). The purpose of this mixed-methods study is to determine to

what extent the Adventist colleges and universities in North America meet the IHEP benchmarks for quality Internet-based distance education. This study also focused on the perceptions and experiences of faculty members in order to better understand the pertinent faculty issues in Internet-based distance education.

Research Questions

The questions concerning the nine Adventist colleges and universities in this study are as follows:

Question 1. To what extent do these Adventist colleges and universities demonstrate quality Internet-based distance education as measured by the IHEP benchmarks?

Question 2. What other issues do teachers identify regarding their experiences with Internet-based distance education?

These questions represent a broad overview of the purpose of this study. Specific hypotheses developed for the quantitative portion of this study include:

Hypothesis 1: Adventist colleges and universities involved in Internet-based distance education meet the IHEP benchmarks for high-quality distance education.

Hypothesis 2: There is no difference between the levels of experience and administrator/faculty perceptions on the IHEP benchmarks.

Hypothesis 3: There is no difference between administrator and faculty perceptions on IHEP benchmarks.

Hypothesis 4: There is no difference between administrator and faculty perceptions regarding their roles in visioning, strategic planning, and policy-making.

Hypothesis 5: There is a correlation between faculty compensation for teaching online courses and their consideration to teach online for another institution.

Hypothesis 6: There is no difference between administrator and faculty perceptions regarding the importance of Internet-based distance education to the future success of their institutions.

Method

This was a sequential exploratory mixed-methods study of the perceptions of teachers on IBDE. It was conducted collaboratively with Pamela Cress who examined administrator perceptions. Data collection for both studies was conducted simultaneously from teachers and administrators at nine North American Adventist colleges and universities. Research participants were first surveyed using an electronic version of the Institute for Higher Education Policy (IHEP) benchmarks. The survey was followed by a qualitative phase that involved telephone interviews with one identified expert in IBDE on each of the nine campuses.

Limitations

A limitation of this study relates to our ability to identify, survey, and interview all faculty members with Internet-based teaching experience. Threats to internal validity arise since I am a member of the academic community that is being studied and subjects may not be as inclined to provide information as freely. Additionally, since names and institutions are attached to the participants' survey information, they may provide information to improve the image of their institution or the position they hold in the institution.

Delimitations

The participants in this study were limited to those chosen from nine Adventist institutions of higher education actively teaching Internet-based courses at the time of data collection.

Definitions of Terms

The following terms are defined as they are used within this study.

Asynchronous Communication: Communication in which interaction between participants does not take place simultaneously (Willis, n.d.).

Chat Room: An Internet-based synchronous communication tool, which allows two or more users to communicate synchronously.

Distance Learning/Distance Education: Instruction and learning that occurs when teacher and student are not located in the same place.

Distance Education Systems Model: A model that views the system as a whole, promoting integration and the interrelationship of individual components in the system. This model recognizes that change in one part of the system will affect the entire system. In distance education, specific component processes include: learning, teaching, communication, design, management, history, and institutional philosophy (Moore & Kearsley, 2005).

e-Learning: Learning that is facilitated online through network technologies (Garrison & Anderson, 2003).

Electronic Bulletin Board/Discussion Board: A computer mediated, text-based discussion where students and faculty can participate in asynchronous communication.

Face-to-Face Course: Any course that occurs with the student and the instructor in the same place at the same time.

Hybrid course: Any course in which approximately half the course took place face to face and the remainder of the course was done online.

Institutionally Controlled Benchmarks: Benchmarks for Internet-based distance education, developed by IHEP, that are beyond the scope of direct instructor control: institutional support, student support, faculty support, and evaluation and assessment (Sparrow, 2002).

Instructor-Controlled Benchmarks: Benchmarks for Internet-based distance education, developed by IHEP, that are within the control of the instructor: course development, teaching and learning, and course structure (Sparrow, 2002).

Internet-based/Online/Web-based Course: Any course where the primary means of delivery of course instruction and materials is through the use of the Internet and/or the World Wide Web (WWW).

Synchronous Communication: Communication in which interaction between participants is simultaneous (Willis, n.d.).

Web-enhanced Course: Any course where the primary means of course delivery is face to face with the Internet used to support instruction and the distribution of course materials.

Significance of the Study

The significance of this study to Adventist higher education is to provide an in-depth view of Internet-based distance education from a systems perspective. This systems perspective involves looking at institutional system components such as learning,

teaching, communication, design, management, history, and institutional philosophy (Moore & Kearsley, 2005) and how these components work to provide quality Internet-based distance education. Additionally, one should not take a systems look without analyzing the perceptions of individuals and their interrelationships within the institutions that make up the educational system.

Providing clarity in how distance education is being provided will hopefully highlight strengths and weakness and increase the dialogue about why Internet-based distance education is important to the collaborative mission of Adventist institutions of higher education.

Summary and Organization of Study

Chapter 1 provides the background of the problem facing distance education in higher education, specific problems and information on distance education in North American Adventist colleges and universities, a statement of the problem, the purpose of the study, and research questions, method, limitations, delimitations, and definitions of terms. This study was conducted in collaboration with Pamela Cress who focused on administrator perspectives of Internet-based distance education.

The literature review begins in chapter 2 with a historical overview of distance education. Subsequent topics covered in the literature review are faculty focused including: the theoretical underpinnings of distance education; the no-significant-difference phenomenon; instructivism and constructivism; pedagogy and andragogy; barriers to faculty development; faculty support, and course development; and concludes with the development and research of benchmarks for quality Internet-based distance education. The literature review in the Cress study focuses on administrative issues.

Chapter 3 describes the methodology used for this and the Cress study since data collection was conducted simultaneously for both studies. A detailed description of research design and rationale are provided, as well as information on the research participants, the instrumentation, and procedures used for the quantitative and qualitative phases of the study.

Chapter 4 describes data analysis and summarizes the results. Chapter 4 is identical in both this and the Cress study. The decision to report the data separately on faculty and administrative results was abandoned because the presentation of all the data gives the reader of each study greater perspective on the interconnection between faculty and institutional issues. Chapter 5 summarizes the study findings with a discussion and recommendations from a faculty perspective. The Cress study will summarize and discuss findings from an administrative perspective.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter covers the following topics regarding distance education: the history, the theoretical underpinning, and the no-significant-difference phenomenon. The dichotomies of instructivism and constructivism as well as pedagogy and andragogy will also be discussed. The systems that support faculty in distance education and the IHEP benchmarks will additionally be presented. The literature review in the Cress study will analyze and synthesize the literature on administrative issues.

Historical Overview of Distance Education

Distance learning is not new and, in fact, may be much older than we think. Klass (2000) in his article entitled *Plato as Distance Education Pioneer: Status and Quality Threats of Internet Education* asserts that distance education was no doubt pioneered by Socrates in 360 B.C. with the publication of the *Dialogues*. Klass (2000) postulates that this first significant use of the written word allowed the *Dialogues* to essentially become course materials available to students who lived at a distance from the instructor. On a more humorous note, it is pointed out that the *Dialogues* also discuss the first faculty resistance to the new technology of the written word. It is quite ironic that Socrates

himself is insisting that there must be “rear-guard action to try to slow down or stop the inevitable” (Klass, 2000, p. 3).

Others believed that distance learning really took hold in A.D. 1450 when Johannes Gutenberg invented the printing press (Goodman, 2002). Once the idea of books being mass-produced began, it was not long until millions of readers began to benefit from the ideas of others. Again, critics were in place. Monks who spent months and years transcribing and copying texts were certain that the print press editions were poor quality and would not last long. Those who favored the face-to-face story telling were sure that the printed book (with silent reading) would mean the demise of the oral tradition (Goodman, 2002).

Since the work of A.W. Bates (1995) in *Technology, Open Learning and Distance Education*, much of the literature has viewed the historical evolution of distance education in terms of generations. The generations can be distinguished based upon several criteria including: the types of technology used, communication patterns (i.e., one-way, two-way, or many-way), the rate information is communicated, student characteristics and needs, and pedagogical philosophies (Bates, 1995; Lewis et al., 1999; Sherron & Boettcher, 1997).

The history of distance education in the United States began over a century ago with courses delivered by mail (Moore & Kearsley, 2005). Originally known as correspondence study, the earliest documented course offered in the United States was shorthand (Simonson, Smaldino, Albright, & Zvacek, 2003). In the late 19th century, University of Wisconsin documents described an operating distance education program that could be undertaken by serious students (Auxford, 1963). Educators in universities

have long been using the latest technologies to deliver education to students (Moore & Kearsley, 2005), and students have been studying and learning in places that geographically separated them from their instructors (Klass, 2000).

These early beginnings of distance education represented the first generation of distance education. Communication through printed materials known as study guides with students writing essays, taking tests, and sending other assignments through the mail is still a popular form of distance education (Moore & Kearsley, 2005). The first generation spanned over a century from 1850s to 1960 and was characterized predominantly by the use of one technology, the printed page (Lewis et al., 1999; Sherron & Boettcher, 1997). Communication patterns and the flow of information were generally slow and went in one direction from teacher to student (Lewis et al., 1999). The first generation of distance education can be seen as a teacher-centered model using highly structured, mass-produced course materials targeting students who were isolated and highly motivated.

The second generation began to evolve in the 1960s until the mid-1980s (Sherron & Boettcher, 1997). The most significant progression in the second generation was the development and wide use of technologies (i.e., videocassette recorders, fax, television) that sped up communication patterns or allowed students to view course materials at any time (Lewis et al., 1999). Other than the use of multiple technologies and changes in the speed of communication, the second generation is philosophically unchanged from the first generation. This is particularly true in the United States; however, internationally the Open University movement was beginning to develop (Moore & Kearsley, 2005).

The third generation hailed Open Universities, designed for students studying in their homes or workplaces, in their own time. Open Universities advance distance education through a systems approach (attending to all the components of a distance education system) while utilizing the different forms of technology available at the time. Correspondence study was still a part of this concept, but in addition, Open Universities relied heavily on the broadcast and record media, such as radio, television, and audiotapes (Moore & Kearsley, 2005).

The expanded use of technology had a significant impact on the fourth and fifth generations of distance education spanning the mid-1980s to today (Moore & Kearsley, 2005; Sherron & Boettcher, 1997). Not only could information be made available more quickly and in larger amounts, interactivity was greatly enhanced between course participants through the use of videoconferencing, e-mail, chatrooms, and electronic bulletin boards (Lewis et al., 1999). In the fourth generation, teleconferencing was used to enhance interactivity, whereas the use of the Internet characterized the fifth generation (Moore & Kearsley, 2005). Though highly structured, learning is more student-centered with greater opportunities for individualized instruction. Students have more contact with instructors and other students in the course and their educational opportunities multiply to include individual courses, degree programs, and life-long learning (Sherron & Boettcher, 1997). The concept of the university changes because the traditional higher education institution looks different. Geographical brick and mortar institutions no longer bind students and teachers. The idea of university becomes a mental construct of teaching and learning that is not bound by location due widespread use of personal computers with Internet access.

Delivery of course materials harnesses the latest technology to set up networks of learning and allows students to decide a course of study. Students may access this material any place at anytime just because they want to know the information, not necessarily because they want a degree. Fourth generation distance education utilized multiple technologies including: broadcast television or videotape, delivery and interaction by telephone, satellite, cable, or Integrated Service Digital Network (ISDN) lines (Lewis et al., 1999). The fourth generation of distance education evolved even more as the technologies were based on a combination of computers and telecommunications that allows the learner to communicate synchronously or asynchronously in multiple medias from many locations with other learners and teachers (Moore & Kearsley, 2005).

In the fifth generation of distance education (Lewis et al., 1999; Sherron & Boettcher, 1997) multiple media continued to be used with high-bandwidth computer technologies allowing for greater speed and duration of communication, increased interactivity, and more complexity of instructional delivery. The fourth and fifth generations move pedagogically from the dissemination of information to active learning impacting skill development, attitudes, and knowledge acquisition (Sherron & Boettcher, 1997). Low cost mass-production of course materials on CDs, user-friendly technologies, and the availability of course management programs (i.e., Blackboard, WebCT) have impacted the ease of course development and delivery for teachers, and provide greater support to students. With greater faculty and technical support, students can be less motivated and disciplined than those participating in distance learning in the first three generations. The development of learning communities is promoted through technologies that support increased interactivity, serving to reduce the sense of isolation

of remote students. An elaborate infrastructure is needed to support this generation of distance education including: mass ownership of computers with Internet access, multimedia Internet technologies that are easy to use and access, instructional support from program designers, developers, and producers, faculty capable of teaching the courses, and significant investments by academic institutions (Sherron & Boettcher, 1997).

Theoretical Underpinning of Distance Education

The field of distance education has struggled to develop a comprehensive theoretical foundation that supports pedagogy unique to distance education. If the purpose of theory is to explain phenomenon, this struggle may be a symptom of higher education's difficulty in understanding the phenomenon of distance education in an era of information technology (Moore & Kearsley, 2005). Many administrators view distance education in terms of production, labor, and cost, while educators seem to navigate the transition through trial and intuition (Garrison & Anderson, 2003; Moore & Kearsley, 2005). Various theorists have attempted to develop theoretical frameworks and models, but they often fall short, leaving the question of whether principles of good teaching and learning are universal (Chickering & Ehrmann, 1996), and distance education is merely an educational sub-set. This leaves one with the quandary of whether distance education is truly a unique educational phenomenon requiring its own theory.

Distance education theory is in an evolutionary process and is moving to embrace issues of distance and dialogue, structure, autonomy, time, and cost (Garrison, 2000b; Jung, 2001; Moore, 1994; Moore & Kearsley, 2005; Simonson, 1999). As this process continues, it will be vital that the developing theoretical underpinning addresses the core

issues of teaching and learning at a distance, while remaining pertinent as educational technology continues to change (Garrison, 2000b ; Garrison & Anderson, 2003). It is unclear whether these theoretical developments will assist in clarifying the distinctness between traditional higher education and distance education thus widening the pedagogical gap; or serve to define the core of good teaching and learning regardless of the physical location of classrooms, students, and teachers. Each scenario positions the field of distance education to make significant contributions to the broader field of education.

The very definition of distance education has produced dispute among scholars; however, generally agreed upon elements include: (a) the separation of teacher and student in place and/or time; (b) affiliation with an educational organization; (c) the use of technical media; and (d) teacher-student interaction (Moore & Kearsley, 2005; Simonson et al., 2003).

In reviewing the major theoretical contributions to distance education, the early work of Charles Wedemeyer in the 1960s focused on independent study (Wedemeyer, 1971). The emphasis was on the independence of the learner, the use of available technology, and the relationship between the teacher and learner (Wedemeyer, 1971). In many ways Wedemeyer's work was a reaction against the status quo in higher education that is characterized by the teacher-centered model aimed at groups of learners and is highly structured and inflexible.

Otto Peters's industrial production theory is an organizational model that views distance education from a production standpoint rather than teaching and learning (Peters, 2000, 2003). Peters's model provides guidelines for the mass production of distance

education in a standardized form that is cost effective and easily accessible to many students (Peters, 2000, 2003). Although this theory provides a systems approach to the delivery of distance education, there is little contribution in terms of the pedagogical aspects of best practices in teaching and learning.

Guided didactic conversation (Holmberg, 1989) is the distance education theory developed by Borje Holmberg. Ironically this communication theory was developed for a primarily text-based form of education where the full breadth of communication was under considerable constraints. Consequently, the theory's application was aimed at the production of well-written course materials (Holmberg, 1989). Holmberg (1989) did however focus attention on important aspects of effective distance education, namely, pleasurable learning promoted through student motivation and self-study, girded by conversation and good course materials. Holmberg has expanded this theory, now called teaching-learning conversation (Holmberg, 2003), to include the ideas that distance education affords those learners who do not want to be tied to an educational institution in place and time the opportunity for autonomous life-long learning, which benefits both the learner and society.

Michael Moore's work on the theory of transactional distance education attempted to explain distance education by examining the effects that learner autonomy has on dialogue and structure or transactional distance between teacher and student (Moore, 1993, 1994). Moore suggested that the greater the transactional distance, the lower the teacher-student dialogue and structure (Moore, 1993). Conversely, reduced transactional distance is characterized by high dialogue and high structure. Autonomy in this theory seems to be characterized more by student-centeredness versus teacher-control

(Moore, 1994). Although this theory sheds light on pedagogical concerns in teaching and learning, the relationship between the variables of transactional distance (dialogue and structure) and learner autonomy is less clear.

The work of Garrison, Shale, and Baynton (Garrison, 2000b; Garrison & Shale, 1990) more directly addressed the issue of transaction in teaching and learning outside of the structural constraints of the form distance education might take with developing technologies. This allowed a clearer view of the pedagogical nature of teacher-student transaction and emphasized the effect of control upon the transactional process. In this model, control is contrasted with Wedemeyer's view on independent study, and augments Moore's ideas on autonomy and structure, by defining control in terms of influence upon educational transactions (Garrison, 2000b; Moore, 1993; Wedemeyer, 1971). With control seen as influence, student-teacher dialogue becomes central to building a collaborative educational relationship thus reducing the transactional distance while maintaining learner autonomy and redefining the role of the instructor.

In equivalency theory, attention is brought to the inherent differences between face-to-face and distant education, as well as the need for students in both settings to have equivalent learning experiences (Simonson, 1999). It is the responsibility of the instructor to design course work that meets the unique needs of local and distant students. This theory posits a view of different but equal.

Distance education scholars have suggested that the weaknesses in the theoretical underpinning keeps distance education on the fringes of higher education, lacking a clear standard by which to describe, communicate, plan, and research (Keegan, 1996; Moore & Kearsley, 2005). Moore and Kearsley (2005) state that theory is a representation of what

is known about something. In reviewing the literature, it seems that there remains much to know about pedagogical theory in distance education. Verification of theoretical principles of distance education could serve to direct educators towards informed transitions to distance education and technology-enhanced instruction.

No Significant Difference

Much of the debate about distance education has focused on the issue of the comparability of distance education to the gold standard (Diaz, 2000) of traditional face-to-face education. Numerous studies have looked at the issue of “no significant difference” (Russell, 2000). The website www.nosignificantdifference.org lists hundreds of studies that demonstrate the “no significant difference” phenomenon and, additionally, cites numerous studies that have demonstrated that students in online classes performed significantly better. It seems that the purpose of the wealth of research in this area has been to establish the legitimacy of distance education. Diaz (2000) suggests that many of the comparative studies make the assumption that distance and traditional education use two distinct teaching models. More appropriate research questions might examine teaching models that facilitate successful learning and student attributes that complement these contrasting models.

One teacher (Matuga, 2001) in discussing pedagogy as the art of teaching described the comparison this way: “How does someone compare a sculpture to a painting when each art form is fundamentally different? Is either art form any less capable of evolving an aesthetic experience of the viewer? Each learning environment affords or limits pedagogy in its own way” (p. 11).

Instructivism Versus Constructivism

Diaz (2000) reports a literary view of traditional education as teacher-centered and distance education as student-centered. In the traditional teacher-centered model, he described the view of the teacher as a sage transmitter of knowledge or instructivist. Students assume a passive role as the receiver of information, and the lecture is the predominant teaching method. Conversely, he (Diaz, 2000) suggests that distance education is predominated by a student-centered approach in which students construct new knowledge based upon past experiences and prior knowledge. In this model, the teacher's role is seen as a guide or learning facilitator and students assume an active rather than passive role.

Merriam and Caffarelli (1999) define the basic premise of constructivism as a learning process of constructing meaning or "how people make sense of their experience." Aspects of constructivism were further delineated, as having a locus of learning that is internally constructed by the individual, the construction of knowledge as the purpose of education, and the role of the teacher is to facilitate and negotiate meaning with the learner. Constructivist learning would be manifested as experiential self-directed learning, the transformation of perspective, and reflection (Merriam & Caffarelli, 1999).

Huang (2002) recognizes the challenges educators face in the process of shifting from instructivist to constructivist perspectives. He cites constructivist principles to guide practice as using methods that are: interactive, collaborative, facilitating, authentic, learner-centered, and high quality (Huang, 2002). Sammons (2003) contends that learner-centered approaches that are active and dynamic based in constructivist principles serve to tap students' natural learning processes that are used to comprehend their experiences.

He (Sammons, 2003) cites two fundamental features of the constructivist approach in the current generation of distance education that are made possible through Internet technologies as: collaboration about problem-based situations with other learners and the collaborative construction of meaningful ideas about real-life experiences.

Bednar and Charles (1999) describe their own experiences of using constructivist approaches as creating opportunities to learn through authentic tasks, based in real world experiences, collaborative work groups, and reflective thinking. They (Bednar & Charles, 1999) described their role as resource providers in which they structured, guided, and modeled for students.

Wilson and Lowry (2000) suggest that the Internet is a means for achieving the vision of the early constructivist thinkers such as Dewey and Vygotsky because of the opportunities it affords for self-directed learning, connectivity, and communication. They cite three course principles of providing access to information, meaningful interactions with the subject matter, and connecting people for collaborative learning.

In his educational creed, Dewey (1959) supported a view that education should be embedded in real life situations that seek meaning. School is not viewed as merely a place where information is given but as a social community and the teacher is a member of this community. In Dewey's (1944) view, education is a means of continual reconstruction of experiences. He believed that the method of teaching should emphasize active versus passive learning and that expression precedes impression. He explained reason as the law of orderly or effective action (Dewey, 1959) and contended that school often leaves students with meaningless ideas because they are viewed out of their

experiential context. Dewey (1944, 1959) also counseled teachers to observe the interests of students because curiosity spurs learning.

Vygotsky's (1978) concept of the zone of proximal development is important to the educational process as it involves the transformation of social processes to intrapersonal, the process of internalization, and involves an experienced learner. Vygotsky (1978) called the zone of proximal development the space between actual developmental level, using independent problem-solving, and the potential development through problem solving with a capable helper whether a peer or teacher. Learning was then viewed as a social process that requires dialogue and collaboration. Additionally, Vygotsky (1978) is considered a social constructivist because of the emphasis he placed on the social context of learning.

Bonk and Dennen (2003) support the use of constructivist approaches in Internet-based distance education and stated that educators find it difficult to conceptualize new ways of thinking about teaching and learning because of the long history of passive compartmentalized methods. Twelve very specific guidelines were given for constructivist instructional practices in distance education:

1. Establish a safe environment and a sense of community.
2. Exploit the potential of the medium for deeper student engagement.
3. Let there be choice.
4. Facilitate, don't dictate.
5. Use public and private forms of feedback.
6. Vary the forms of electronic mentoring and apprenticeship.
7. Explore recursive assignments that build from personal knowledge.
8. Vary the forms of electron writing, reflection, and other pedagogical activities.
9. Use student Web explorations to enhance course content.
10. Provide clear expectations prompt task structuring.
11. Embed thinking skills and portfolio assessment as an integral part of Web assignments.
12. Look for ways to enhance the Web experience. (p. 335)

Even for those educators who suggest that there is no one best way to teach at a distance (Smaldino, 1999) it is still contended that the separation of teacher and student places greater responsibility on the student for learning. Smaldino (1999) also contends that it is essential for teaching strategies to engage the learner and that the lecture model is the least effective strategy in distance education.

Levine and Sun (2002) described the lack of an online pedagogy as a barrier in distance learning. Faculty, they argue, who are taught little about the craft of teaching while in graduate school are particularly handicapped and will need to learn about pedagogy that is interactive and individualistic in order to thrive in distance education. Traditional higher education is being challenged to rethink the instructivist paradigm. Naidu (2003) states that aspects of this reconsideration include reframing the role of the teacher from the sage on the stage to a guide on the side and the move to student-centered learning.

Seat time and the credit hour are the currency used in higher education and stem from instructivism. Johnstone, Ewell, and Paulson (2002) purport that student learning is a better form of academic currency. The acquisition of knowledge and skills should outweigh the importance of seat time. Lundin (1998) concurs with Johnstone et al. (2002) that virtual learning does not have the same structure and sequence of traditional education-what he terms feral learning. Lundin (1998) contends that learners will challenge educational institutions to recognize their prior knowledge leading to the learner's identification that "I am my university."

Pedagogy Versus Andragogy

Although the roots of andragogy are European, Malcolm Knowles (1990) is best known for his work on adult learning. Andragogy as the art and science of helping adults learn was differentiated from the child-focus of pedagogy. Knowles however did redefine the differences between pedagogy and andragogy less in terms of children and adults to a stance that pedagogy was content-oriented and andragogy a process-oriented model (Knowles, 1984). He called pedagogy and andragogy parallel not antithetical. Knowles (1984) asserted that the assumptions of the pedagogical model included: the concept of a dependent learner, learners who come to the learning process with little experience, the readiness to learn developed only when told that advancement depended on it, an orientation to learning that is subject-centered, and an external motivation to learn. By contrast, he presented the learning approach of the andragogical model as: the learner being self-directed, coming to the learning process with more experience, adults having a readiness to learn in order to become more effective, an orientation to learning that is task-oriented or problem-centered, and that the adult's motivation to learn is primarily internal (Knowles, 1984).

Knowles (1984) also contrasted pedagogical and andragogical approaches to educational design. He stated that the content orientation of the pedagogical approach speaks to: the content to be covered, the organization of content into units, the sequencing of the units, and the efficiency of transmitting the content. The process orientation of andragogy outlines the role of the teacher as facilitator of learning and a secondary role of content resource provider. The design concerns of andragogy include: establishing a climate to facilitate learning, involving the learner in mutual planning, involving students

in defining their learning needs and objectives, and designing, carrying out, and evaluating their learning plans.

Pratt (1993) points out that in much of Knowles's writings exists an emphasis on relationships. Relationships are seen as more important than the approach. In regard to the psychological climate, Knowles (1984) emphasizes the importance of establishing teaching/learning relationships characterized by mutual respect, collaboration, mutual trust, supportiveness, authenticity, pleasure, and humanness.

When Pratt (1993) reviewed the contributions of andragogy, he outlined five fundamentals:

- 1) A moral axiom which places the individual at the center of education and relegates the collective to the periphery; 2) a belief in the goodness of each individual and the need to release and trust that goodness; 3) a belief that learning should result in growth toward the realization of one's potential; 4) a belief that autonomy and self-direction are the sign-posts of adulthood within a democratic society; and 5) a belief in the potency of the individual in the face of social, political, cultural and historical forces to achieve self-direction and fulfillment. (p. 21)

Although andragogy has provided a rich view of the adult learner, Pratt (1993) also points out that andragogy has done little to expand the understanding of the learning process itself. Bullen (1995) concurs that there has been a lack of research to support the tenants of andragogy in practice, and although he supports the adoption of the philosophical notions of andragogy, he also calls for caution and moderation in adopting andragogy into distance education.

Burge (1988) on the other hand supports a neo-andragogical approach in distance education that appreciates the realities of the life of an adult student. Burge (1988) advocates learner responsibility more than self-directed learning and promotes interdependence and collaboration instead of the independence of the learner.

The recognition of the unique attributes of the adult learner should be mindful in that the majority of college students are no longer traditional full-time residential students. It is reported that traditional residential students comprise only 20% of the college population (Levine & Sun, 2002). Students are now older, part-time students who have jobs and families and who do not view campus life as essential (Levine & Sun, 2002; Moore & Kearsley, 2005).

Barriers to Faculty Development

Wolcott (2003) examined the barriers to faculty involvement in distance education and defined barriers as either environmental or institutional factors, or attitudinal perceptions by teachers that deter their involvement in distance education. She (Wolcott 2003) states that the success of distance education is found within a motivated faculty who are rewarded for their efforts. In a review of 24 studies by Dillon and Walsh (1992) over a decade ago, they found that the barriers that existed for faculty then are similar to those found today. The conclusions drawn were that the institutional systems that support distance education are inadequate and that administrative lack of commitment deters faculty involvement. The lack of reward was also viewed as instrumental in drenching faculty motivation to become involved in distance education (Dillon & Walsh, 1992). Dillon and Walsh (1992) also concluded that organizational neglect in supporting professional and institutional development found its failings in the lack of a systems perspective of distance education. Similarly, Olcott and Wright (1995) found that the barriers to greater faculty involvement were institutionally embedded.

The perceptions of faculty noted as attitudinal barriers included: skepticism about the quality of distance education, lack of incentives or rewards, and the lack of the skills

needed for distance education (Wolcott, 2003). Fear was reported as a powerful disincentive to participate: fear of inadequacy, fear of being displaced, losing autonomy and control, the lack of confidence, and fear regarding job security (Wolcott, 2003).

The faculty attitudes most likely to encourage faculty involvement are, the belief that quality learning can take place, student needs will be better addressed, personal capability in course development and teaching, and the view that it is advantageous to become involved (Wolcott, 2003). Intrinsic factors have been found to motivate faculty more than extrinsic; however, Wolcott (2003) reports that extrinsic motives do influence teachers such as peers, incentives, and rewards.

Bonk and Dennen (2003) described the results of a survey of college faculty that found the major barriers in web-based education included: minimal support for instructional design, time needed to learn new technology, lack of support for course development, and neglect in recognizing efforts in rank and tenure advancement. The study (Bonk & Dennen, 2003) found that ways to address these concerns and increase faculty involvement were collaboration and sharing of ideas, increased technical and instructional design support, and to recognize the efforts of the faculty. Additionally, the study (Bonk & Dennen, 2003) found that faculty members were specifically asking for more teaching tools and strategies, advice, support, the time and financial resources to develop courses, and community. In short, Bonk and Dennen (2003) concluded that the faculty were requesting online teaching guidance, mentoring, and expert answers to problems. Resistance by faculty has also been cited as motivated by the lack of technical skills, student expectations that teachers should be lecturing, and rank and tenure advancement that rewards research over teaching scholarship (Naidu, 2003).

A South Dakota study (Wilson, 2003) found common barriers to the successful use of technology by faculty were funding, time, and the faculty reward system. Additional challenges were unrealistic expectations that may come from administrators and/or students and the lack of technological expertise. An interesting finding reported by Wilson (2003) was that gender impacted the use of university resource centers, with female faculty being higher utilizers. Age and rank however did not prove to be significant. An Indiana study (Butler & Sellbom, 2002) found that the faculty identified major barriers to the adoption of educational technology as: lack of support, unreliability of technology, unclear if technology is effective, and the need for more time to learn to use technology. Interestingly, the study found that the most proficient technology users identified the same barriers as the least proficient users.

Faculty Support

Without faculty training and support, teachers are often left to their own devices and do not harness the best use of technology and effective teaching methods (Naidu, 2003). This can lead to online teaching practices that reflect the old paradigm of merely transmitting information. Naidu (2003) states that faculty frustration is often the result of shortcomings in course design and the development of online teaching strategies that match their subject matter. The challenge of faculty training is to help teachers to learn to teach with technology rather than use technology merely for the transmission of information (Palloff & Pratt, 2001).

Some of the literature (Bonk & Dennen, 2003; Naidu, 2003) cites the lack of recognition for rank and tenure advancement as a barrier to faculty involvement; however, Wolcott (2003) suggests that pressure is mounting in the opposite direction.

Wolcott (2003) states that faculty are experiencing increasing pressure to become technologically competent from students, institutional initiatives for distance education, and in order to advance in rank and tenure. This pressure may result in greater needs for faculty support and training. It is however acknowledged that in the rank and tenure process, the view of what constitutes scholarship needs to expand to encompass the time and effort needed for professional development in distance education and the use of educational technology (Wolcott, 2003).

A conceptual framework influenced by constructivist theory, especially that of David Kolb, was adapted to develop a means to engage and teach faculty to use instructional technologies (Chism, 2004). The model proposed by Chism (2004) proposes the promotion of a spiraling process of planning, acting, observing, and reflecting. This framework views the faculty learner as an individual who is accustomed to autonomy and who came to teaching with little pedagogical preparation. This presents the need for what Chism (2004) calls on-the-job training. In the reflecting phase of the learning cycle, faculty consider their past experiences and what the implications are for future change. During the planning phase, teachers prepare to implement changes as a result of the reflective process. When applied to distance education the decision to act after reflection and planning is determined to a great extent according to the availability of support, willingness to take risks, and a sense of urgency (Chism, 2004). The observing function gives faculty the opportunity to observe the changes they have made in action. Evaluation and assessment can aid meaningful faculty observation. Butler and Sellbom (2002) also highlight the need to focus on learning versus training when providing support for faculty.

In a study of faculty perceptions on technology use in the South Dakota Regental System (Wilson, 2003), findings implicated the important role of faculty support. The study's (Wilson, 2003) major findings were: If provided with technology, the faculty will actively use it, online teachers are more likely to use instructional technology, faculty learn more about technology from informal rather than institutional provided sources, although some campus resources (i.e., center for instructional design, technology infrastructure) are viewed as more helpful than others, and that internal motivations have a greater impact than external. The study's (Wilson, 2003) recommendations for practice were an imperative for universities to support faculty in more and new ways, schools need to find ways to give faculty more time to integrate technology, give new incentives, and find more funding. The study (Wilson, 2003) also suggests that collaboration between institutions can produce more rapid adoption of new technologies, the promotion process should recognize technology use, and institutions and faculty should be encouraged in the adoption of a student-centered paradigm.

In a mixed-methodology study examining the perceptions of faculty and administrator perceptions of instruction support, the researcher (Lee, 2002) found significant differences between the two groups. The faculty mean scores were less favorable than administrators on all of the variables of instructional support, which were course design, course facilitation, technology use and needs, teaching methods, evaluation, rewards, incentives, and personnel support. Statistical significance was found on all of the dependent variables listed. The qualitative findings were consistent with the survey results with major themes being: Faculty members qualified instructional support efficiency and consistency versus availability as a primary problem, communication

about the available support was also seen as problematic by the faculty, and support was viewed as poorly managed and emphasized technology use instead of teaching methods. The lack of adequate time, incentives, and rewards was also revealed in the qualitative data. Faculty members viewed administration as paying little attention to the quality of campus support. Administrator's comments reflected an overall view that instructional support services were good. The support that was reported as helpful by the faculty was informal peer mentoring and sharing of teaching methods (Lee, 2002).

Ranker and Clay (2002) described struggles that East Tennessee State University experienced in designing an effective system of faculty support to meet campus needs. They described their approach as "build it and they will come." The problem with this philosophy was that it worked well for early adopters but not for many other faculty members. They found four major problems as: the lack of ownership by the faculty, chairpersons not engaged, focus on technology instead of teaching and learning, and an unclear understanding of baseline levels of faculty competency. Corrective measures included clearly stated goals and objective and modification to training and support offerings, as well as concerted efforts to focus faculty development at the departmental level by working closely with deans and chairpersons (Ranker & Clay, 2002).

The literature points to faculty support as providing opportunities for interdisciplinary, inter-institutional, and corporate-academic partnerships and collaboration (Cannata, Cavanaugh, Nicastra, Orr, & Wheeler, 2002; Care & Scanlan, 2000; Meyen, 1999; Truman-Davis, 1999). Katz et al. (2003) report a process by which an institution might identify potential partners by first defining objectives, identify needed capabilities, assess exiting capabilities, and skill gaps. If the institution lacks the

capability to meet the identified skill gaps, an opportunity to seek and engage in partnerships emerges.

Meyen (1999) reports that partnerships between distance education faculty and technical developers are relationships that seem to develop naturally; however, technical development will need to grow and develop in order to meet faculty support needs. A Boston consortium of colleges and universities has developed a model of collaboration of information training that is both cost effective and meets campus needs (Cannata et al., 2002). The consortium represents great diversity of campuses from Harvard to Berklee College of Music. Smaller schools benefited from sharing the wealth of resources available on larger campuses, while smaller schools provided opportunities for larger schools to innovate and experiment with new ideas. The University of Central Florida is an excellent example of inter-disciplinary and inter-departmental collaboration (Truman-Davis, 1999; Truman-Davis, Futch, Thompson, & Yonefura, 2000).

The University of Central Florida may be described as a model of best practices in faculty support and institutional commitment. Truman-Davis et al. (2000) discuss this campus's practices of developing a comprehensive institutional distance education initiative. The University of Central Florida recognized the need for a system-wide view of distance education through the development of an evaluation process of institutional and faculty readiness. The conditions viewed as favorable for institutional readiness took into consideration whether there is a good fit with the institution's character and mission, with learner characteristics, a clearly articulated mission and strategic plan, and a demonstrated level of faculty interest. The campus is expected to have a robust campus infrastructure, distance learning leadership, commitment to learner support,

course/program support, and faculty support. The University of Central Florida reported numerous benefits from their institutional initiative including cross-disciplinary collaboration, community building, the creation of life-long learners, greater faculty discussion of teaching and learning, an openness to peer evaluation, innovation, modes of diverse delivery of education, greater flexibility for the faculty, and the transformation of campus teaching practices involving more active learning (Truman-Davis et al., 2000).

The University of Central Florida (Truman-Davis et al., 2000) demonstrated the need to assist faculty to adapt to the change in campus culture. The faculty who adapted the most successfully were reported to have the traits of motivation, willingness to give up some control of course development and teaching style, able to collaborate, open to role change, able to learn from others and create a support system, and showed patience with technology. In order to make these changes, the institution was expected to provide assistance and support in the professional development of distance education. Faculty development was designed on a three-pronged approach of technology, pedagogy, and logistics that ensured that the faculty would have the skills and tools needed to be successful (Truman-Davis et al., 2000).

Course Development and Design

Faculty support is often equated with technology training; however, as faculty members transition to online distance education, support for course development and design is an area of specific need. Along with the paradigm shift to a student-centered model comes the need for new teaching and learning strategies and methods. Norton and Wiburg (2003) described the teacher as designer this way:

The teacher as a designer recognizes the centrality of planning, structuring, provisioning, and orchestrating learning. Although the role of designer may be the least observed or recognized teacher role, the intellectual analysis of content filtered through an understanding of learning and learners and the subsequent construction of learning opportunities for students underpins all robust and worthwhile learning opportunities. (p. 43)

The recognition of the importance of course design in the teaching and learning process is often made more frustrating for instructors in distance education who traditionally have been able to fulfill this role autonomously, but find that they require inordinate amounts of support in a virtual environment (Chism, 2004; Naidu, 2003).

A model for Internet-based course design developed by Hall, Watkins, and Eller (2003) consists of seven components guided by three themes to provide a framework for online course design. The seven components include: directionality, usability, consistency, interactivity, multimodality, adaptability, and accountability. These seven components are guided by the three themes of directionality, the tension between simplicity and complexity, and evaluation and assessment. In the theme of directionality, Hall et al. (2003) assert that the first step in course design should consider direction and account for the context, goals, and learners. Subsequent course development exudes from the establishment of direction. The second theme attempts to maintain a balance between course design that lies between the dichotomy of simplicity and complexity. Hall et al. (2003) suggest that novice course developers tend towards too much complexity while the more experienced focus on simplicity to the detriment of enhanced learning through more complex methodologies. Third, they point to the vital role that evaluation and assessment play in accountability and as a means for design improvement.

Naidu (2003) uses the term “design architecture” to describe pedagogy that takes into consideration the learning environment, subject presentation, learner activities,

learning support, assessment, and feedback. It has been suggested that distance education has brought a shift to the teacher's role in course development and design. Instructional design was once seen as the sole domain of the teacher; however, in Internet-based distance education, the teacher is often viewed as the content expert but often is unable to assume complete responsibility for the development of an online course which requires a team approach (Naidu, 2003). Naidu (2003) reports that the greatest challenges for course development are conceptual not technical. He goes on to say that technology is only a medium for the education process.

The development of student scaffolding that is permeable and flexible was cited by Naidu (2003) as a major deficit in distance education. He suggests that developing learning strategies can assist students in "learning how to learn." Learning strategies identified included: rehearsal, elaboration, organizational, self-monitoring, and motivational. Some of the specific teaching practices suggested to fulfill these learning strategies were distributed problem-based learning, critical incident-based computer-supported collaborative learning, goal-based learning, learning by design, and web-based role-play simulation (Naidu, 2003).

Sammons (2003) states that specific methods should be used to engage learners such as the dynamic search for information on the Internet which expands the source of information available traditionally only from the teacher and text. Other features are the use of multiple-media for communication and collaboration and meaning-making through the use of real or simulated situations. It has also been postulated that the activities that tend to the psychological, social, technological, managerial, and pedagogical are core

considerations in course development (Bonk, 2000; Bonk & Dennen, 2003; Garrison & Anderson, 2003; Sammons, 2003).

Chickering and Gamson's (1991) classic *Applying the Seven Principles for Good Practice in Undergraduate Education* has been adapted for the era of educational technology (Chickering & Ehrmann, 1996). In *Implementing the Seven Principles: Technology as Lever* (Chickering & Ehrmann, 1996), adaptations for use with educational technology are given in the effort to honor principles of good teaching and learning. Counsel for best practices include: encourage student-faculty contacts, develop student reciprocity and cooperation, use active learning, provide prompt feedback, encourage time on task, communicate high expectations, and be mindful of student diversity in learning styles and talent (Chickering & Ehrmann, 1996).

Common throughout the literature on course development is that courses need to be rebuilt for online delivery (Higher Education Program & Policy Council, 2000; Palloff & Pratt, 2001; Smaldino, 1999). A face-to-face class that was taught from a teacher-centered philosophy of information transmission should not make the transition to an online format without major reconsideration and transformation (Palloff & Pratt, 1999; Smaldino, 1999). Teachers will need to find new ways to encounter course content to determine what is essential (Smaldino, 1999). Allowing for adequate time for course development, reflection, and analysis is also recommended (Smaldino, 1999; Vrasida & McIsaac, 2000).

Reflecting the constructivist underpinning of online distance education, the literature also calls for the features of interactivity and collaboration as hallmarks of good course design (Bonk, 2000; Bonk & Dennen, 2003; Palloff & Pratt, 1999, 2001).

Interaction should be encouraged between teacher and student, from student to student, and between student and content (Chickering & Ehrmann, 1996; Moore & Kearsley, 2005; Vrasidas & McIsaac, 2000). Smaller class sizes are seen as a means to encourage better class communication (Higher Education Program and Policy Council, 2000).

Less clear in the literature on course development and design is the issue of accommodating self-directed learning. Much of this concern comes from distance education's past history in correspondence studies. Correspondence work allowed for a great deal of learner self-direction, but was also prescribed with little student-teacher interaction and no student-to-student interaction (Moore & Kearsley, 2005). Designing online courses that maintain interactivity and promote community-building while encouraging individual student self-regulation seems to present challenges (Cennamo, Ross, & Rogers, 2002)

Evaluation and assessment are called for as a vital tool for the instructor learning process in order to conceive and implement design improvements (Chism, 2004; Lockee, Moore, & Burton, 2002; Vrasidas & McIssaac, 2000). Some authors suggest student self-assessment should be included as a part of course development (Cennamo et al., 2002). Norton and Wiburg (2003) urge teachers, especially those using innovative practices with technology, not to rely solely on assessment strategies by outsiders. This will require envisioning opportunities for assessment that is meaningful to the teacher. Garrison and Anderson (2003) describe assessment as essential in the quest for quality.

In a qualitative study by Care and Scanlan (2000) in the field of nursing, two models of course development were discovered. One model was a linear process (parallel-linear model) while the other was circular (interdisciplinary team model). Both

were concluded to be successful means of course development. In the parallel-linear model an interdisciplinary group consisting of the program director, an instructional designer, faculty as content specialists, and technical support staff worked in conjunction offering their individual expertise to develop a course. The researchers reported frequent interactions from team members: however, these interactions generally were between two team members. The whole group never met together as an entire team before, during, or after course development (Care & Scanlan, 2000). By contrast, the interdisciplinary team model with a similar member composition met as a team on a regular basis throughout the course development and teaching process including after the class was over in order to reflect and evaluate. The reported strength of the interdisciplinary team model was that the team members themselves learned from each other, thus strengthening their knowledge and relationships (Care & Scanlan, 2000).

Moore and Kearsley (2005) support the concept of course development from a team perspective using experts or specialists to focus on specific aspects of course development and design such as content, technical, instructional, and library resources. The strength they report is in the production of a superior product, while the weakness is that team development is time intensive and expensive.

In the search for the best teaching practices, Brown and Johnson-Shull (2000) point out that

there are no fool-proof formulae, recipes, or shrink-wrapped packages for teaching, online or otherwise. Human interactions are fickle and capricious. It may be that, despite the very clean and orderly machines that we use to engage each other, the machinations of the human psyche will always manufacture a cluttered mess that can only be sorted out and understood by humans in the midst of the mess. (p. 4)

Bonk (2000) states that teachers need common sense, patience, and instructional savvy to teach successfully online. These insights from the rich experiences of seasoned teachers can be shared with faculty faced with making the transition to online teaching through mentorship.

Benchmarks for Internet-based Distance Education

The development of distance education theories and practice standards seems to have been outpaced by the rapid growth of Internet-based distance education. Many organizations have developed benchmarks, guidelines, best practices, and principles for the field of distance education (*Best Practices for Electronically Offered Degree and Certificate Programs*, n.d.; *Guidelines for Distance Education*, 1997; *Guiding Principles for Distance Learning in a Learning Society*, 1996; Institute for Higher Education Policy, 2000; *Policy for Delivering Degree Programs Through Distance Education Technology*, 1998; *Principles of Good Practice for Distance Learning/Web-based Courses*, n.d.). The IHEP study *Quality on the Line: Benchmarks for Success in Internet-based Distance Education* (2000) asked the question of whether these benchmarks, guidelines, best practices, and principles apply specifically to Internet-based distance education. The National Education Association, which is the largest faculty professional association and Blackboard Inc. (an extensively used course management system for web-enhanced and web-based education), commissioned IHEP to validate the benchmarks that are specifically applicable to Internet-based distance education.

This IHEP (2000) validation process involved a three-phase sequential study: first through a comprehensive literature review which produced 45 total benchmarks, then the identification of institutions representing leadership and vast experience in distance

education, and the third phase involved site visits to each institution to determine the degree that the benchmarks are integrated into their facilities. Campus faculty, administrators, and students were surveyed and interviewed regarding the presence and importance of the 45 benchmarks. Twenty-four benchmarks emerged from the study as essential to quality distance education. In the final analysis, several benchmarks were combined, 13 were eliminated, and 3 benchmarks were added. The broad areas in which the benchmarks are clustered include: institutional support, course development, teaching/learning, course structure, student support, faculty support, and evaluation and assessment.

The institutional support benchmarks address the institution's efforts at maintaining an atmosphere favorable to quality Internet-based distance education through infrastructure and policy-making. These benchmarks include: a documented technology plan including a system providing for security; assurances of the reliability of the technology delivery system; and a system supporting and maintaining the infrastructure of distance education (Institute for Higher Education Policy, 2000).

Course development benchmarks focus on the development of courses and courseware used in educational delivery (Institute for Higher Education Policy, 2000). The course development benchmarks are: the availability of standards for course development, design, and delivery; the provisions for the review of course periodicals; and whether course design supports a learning environment in which students analyze, synthesize, and evaluate as part of the course requirements.

The teaching/learning category addresses teaching methods and pedagogy. These benchmarks involve: the vital role of course interactivity; appropriate feedback given to

students in a timely manner; and the use of effective research/assessment methods in determining the validity of resources (Institute for Higher Education Policy, 2000).

The benchmarks on course structure speak to the teaching/learning process from the standpoint of how the system's policies, procedures, and resources support teaching and learning (Institute for Higher Education Policy, 2000). The four course-structure benchmarks are: the provision of student advisement regarding motivation and minimum technology requirements prior to enrollment; providing students with course information in written form; the availability of library resources; and teacher and student agreement on the times for submission of assignments and faculty response (Institute for Higher Education Policy, 2000).

Student support benchmarks address not only the usual student services available on the campus at large, but also include the needed training and support for taking an Internet-based course. These benchmarks involve: students being made aware of the availability of programs, services, and processes such as admissions, tuition, fees, textbooks, technical support, and other support services; hands-on training in using electronic sources; access to technical support throughout the course; and a system of responding to student support needs in an appropriate and timely manner (Institute for Higher Education Policy, 2000).

Benchmarks for faculty support provide teachers with ongoing assistance to support the transition to Internet-based instruction. The benchmarks for faculty support are: technical assistance in the development of online courses; assistance for faculty in the transition to Internet-based instruction including assessment; faculty training and mentoring that is available throughout the course; and written materials that are provided

relating to student issues regarding the use of electronic sources (Institute for Higher Education Policy, 2000).

Evaluation and assessment centers around the policies and procedures for the evaluation of distance learning. Three benchmarks were identified in this category, including: program evaluation using more than one method and driven by standards of practice; data on educational technology used in evaluating effectiveness; and regular review of learning outcomes.

Summary

In reviewing the literature on faculty issues in distance education, from what initially appears to be a quagmire of confusion about pedagogy, theory, methods, and course development, a picture of distance education emerges as an evolution in progress. Constructivism seems to be the theoretical orientation that undergirds beliefs about the learning process, and this belief is revealed in the practices being reported in course development, design, and teaching methods. Of particular interest is that as faculty members struggle to keep from slipping off of the steep learning curve presented by educational technologies, they themselves are utilizing the very learning strategies that are espoused as best teaching practices with students. Namely, they include peer collaboration, interactivity, experimentation, evaluation, and reflection. Could it be that the faculty's own experiential learning, though often unguided, into distance education is the incubator for a developing distance education pedagogy?

Although the distance education literature does not seem to fully embrace the principles of andragogy, there is certainly a sense that distance education has a particular

audience of adult learners who come to the educational process with unique needs. There seems to be a philosophical rather than practice-oriented alignment to andragogy.

The literature presented a good deal of information about the barriers that faculty members face in distance education. Two prominent themes emerged from the literature as faculty barriers, which were faculty support and time constraints. Faculty members are reporting that they need time and assistance in learning the technical and teaching skills needed in distance education.

The structure of this chapter consisted of a review of the literature on faculty issues in distance education. A historical background of distance education and the theoretical underpinnings were presented. A discussion of the literature on the compatibility of constructivism and andragogy to Internet-based distance education was outlined. Finally, the barriers identified as interfering with faculty development were provided along with the concerns of faculty support and course development.

CHAPTER THREE

METHODOLOGY

Introduction

The purpose of this chapter is to present the research rationale and design used to study distance education in Adventist colleges and universities utilizing the IHEP benchmarks. The chapter contains information about the population studied, sampling process, data collection, data analysis, validity, reliability, and generalizability.

Collaborative Study

This research study is part of a collaboration focusing on distance online education using the IHEP benchmarks for success in Internet-based distance education. This study focused on the perceptions of teachers in Adventist higher education regarding Internet-based distance education while, at the same time, a second study conducted by my colleague, Pamela Cress, looked at Internet-based distance education from the perspective of administrators in these same institutions. The rationale for use of a collaborative approach to this study was to provide a broader perspective and description of distance education in NAD colleges and universities.

Research Design

The design for this study is a sequential exploratory mixed-methods approach (see Figure 1). Creswell (2003) defines sequential mixed-method as a study that collects and

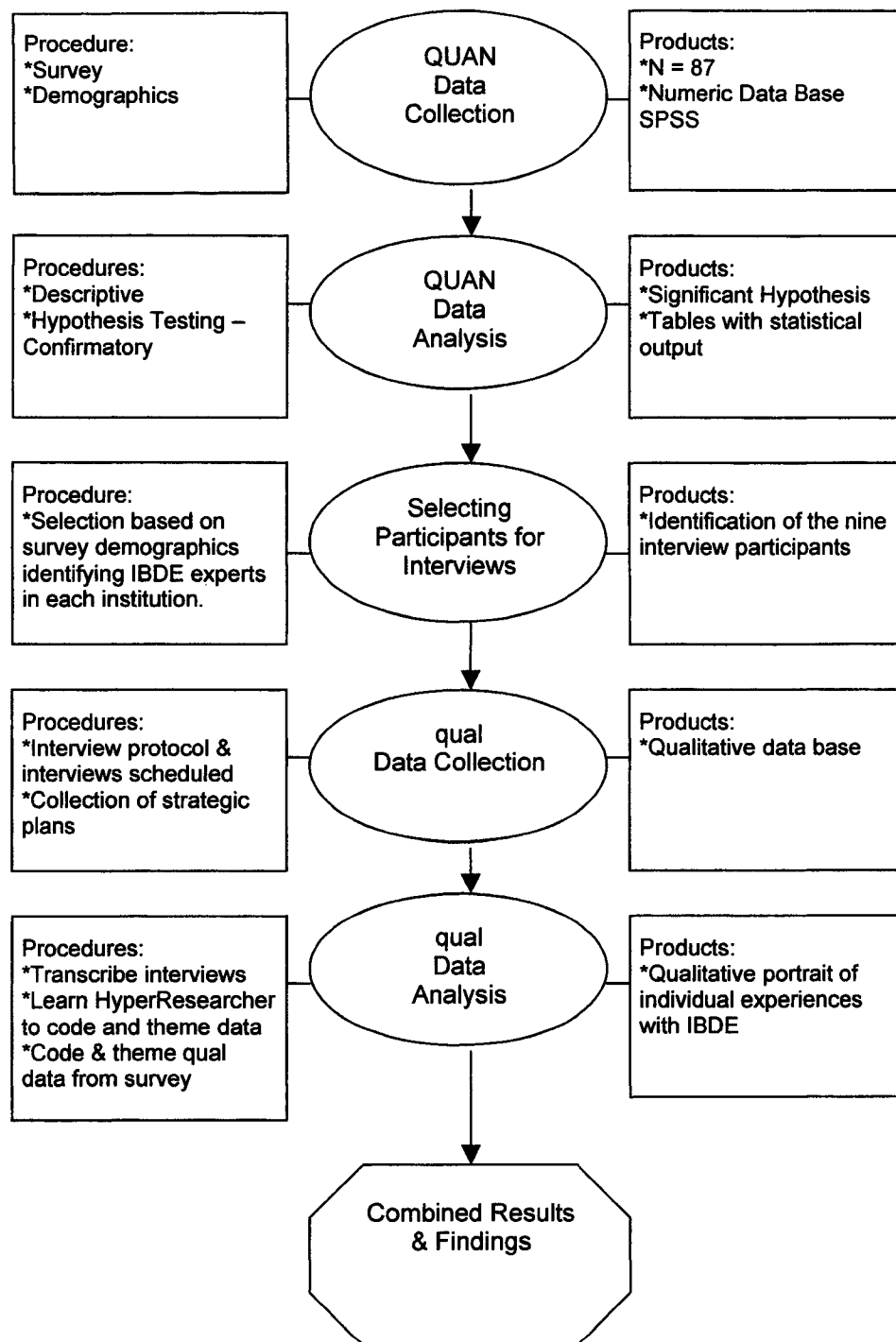


Figure 1. Sequential exploratory mixed-methods design QUAN-qual.

analyzes both qualitative and quantitative data using one method to expand the other. This study used the sequential method by collecting broad numeric quantitative data first followed by the collection of qualitative data through interviews of research subjects (Creswell, 2003; Onwuegbuzie & Teddlie, 2003). Terminology for mixed-methods approaches is varied and includes names such as integrative, multi-method, convergent, and combined. Since “mixed-methods” appears most often in recent literature (Tashakkori & Teddlie, 2003) it is being utilized as a descriptor of this research design.

Rationale for Research Design

The rationale for using the sequential mixed-methods design includes the expectations that qualitative methods will develop the data collected quantitatively (Creswell, 2003; Onwuegbuzie & Teddlie, 2003), and the research design best fits the pragmatic philosophy reflected in distance education literature (Maxcy, 2003; Saba, 2003). Pragmatic researchers are not bound by a particular research method due to their focus on the problem. This focus of problem over method naturally embraces the use of mixed-methods in research and frees the researchers from a dualistic perspective that separates intellect from practice (Creswell, 2003).

Saba (2003) speaks directly to pragmatism in studying distance education by stating that “pragmatism is evident in the search for ‘best practices’ and the establishment of methodological benchmarks” (p. 3). Further, pragmatism as a foundation could help distance education formulate new paradigms (Saba, 2003). Distance education theorists are calling for future research to test theoretical models by focusing on practice in distance education (Garrison, 2000a; Moore & Kearsley, 2005).

Pragmatism connects intellectual concepts with actual experiences to form a plan of action in order to find answers to specific problems (Maxcy, 2003; Morris, 1970). This notion is consistent with this study because it provides a rationale for connecting concepts and practices to influence institutional strategic planning in distance education. Further, as members of the community being studied, we have an intrinsic desire to promote quality distance education that includes conceptual reflection, best practices, and intentional planning. It has also been suggested that one contribution of a pragmatic focus in research is to offer the community technical knowledge and new information (Cherryholmes, 1992) This knowledge may present an integrated view of why and how the system is operating and suggest areas for further planning and research.

Research Questions

The questions concerning the nine Adventist colleges and universities in this study as stated in chapter 1 are as follows:

Question 1. To what extent do these Adventist colleges and universities demonstrate quality Internet-based distance education as measured by the IHEP benchmarks?

Question 2. What other issues do teachers identify regarding their experiences with Internet-based distance education?

These questions represent a broad overview of the purpose of this study. Specific hypotheses developed for the quantitative portion of this study include:

Hypothesis 1: Adventist colleges and universities involved in Internet-based distance education meet the IHEP benchmarks for high-quality distance education.

Hypothesis 2: There is no difference between the levels of experience and administrator/faculty perceptions on the IHEP benchmarks.

Hypothesis 3: There is no difference between administrator and faculty perceptions on IHEP benchmarks.

Hypothesis 4: There is no difference between administrator and faculty perceptions regarding their roles in visioning, strategic planning, and policy-making.

Hypothesis 5: There is a correlation between faculty compensation for teaching online courses and their consideration to teach online for another institution.

Hypothesis 6: There is no difference between administrator and faculty perceptions regarding the importance of Internet-based distance education to the future success of their institutions.

Participants

Descriptive information regarding the participants in the quantitative survey and qualitative interviews is presented in this section. In addition to the participant descriptions, greater details are provided regarding the sampling methods used to select the participants.

Participants for Quantitative Survey

Administrators and instructors from the nine participating institutions that offer Internet-based courses were surveyed using the IHEP benchmark tool. Attempts were made to survey all the following administrators from each institution: presidents, vice-presidents for academics, financial, and enrollment; and directors of distance education, information technology, and academic computing. Attempts were also made to survey all

faculty teaching at least one course online from the 2002-2003 academic year to the date of data collection. The institution's ADEC board representative was also surveyed.

Names for the survey list were developed in collaboration with each institution's office of academic administration.

As a result, 149 electronic surveys were sent to administrators and teachers in nine Adventist institutions offering Internet-based distance education, with a return rate of 58%. Of the 87 administrators and teachers who responded to this survey, 49 were males, 33 were females. Five respondents did not provide demographic information. Fifty-two teachers and 35 administrators responded to the survey. The administrative positions represented included: Presidents ($n = 5$), Academic Vice-Presidents ($n = 6$), Vice-Presidents of Finance ($n = 4$), Vice-Presidents of Enrollment ($n = 4$), Directors of Distance Education ($n = 6$), Directors of Information Technology ($n = 6$), and Other ($n = 4$) with missing data from one respondent. One administrator held dual roles of Vice-President of Academic Administration and Director of Distance Education, and all who identified themselves as ADEC representatives held one other administrative role.

In addition, the data revealed a group who reported both online teaching experience and active administrative responsibilities. These participants, who we refer to as Admin/Teachers, had administrative responsibilities that ranged from Vice-Presidents to Dean/Chair and Directors. When considering the category of administrator/teacher the sample ratios for positions in three categories identified 25 administrators, 41 teachers, and 21 administrator/teachers.

Forty-four of the respondents held a doctoral degree, with 29 reporting master's degrees, and 9 bachelor degrees. Respondents' total years in higher education are

represented by three categories: 1-10 years ($n = 27$), 11- 20 years ($n = 36$), 21+ years, ($n = 19$).

Participants for Qualitative Interview

The nine participants interviewed in the qualitative portion of this study represented each of the nine institutions and were selected because they were the most frequently identified experts on their campuses. The process of identifying these experts involved, (a) asking survey respondents to identify Internet-based distance education expert(s) on their campus, and (b) reviewing all names submitted to determine the most frequently cited individual per campus. The expert from each campus was then interviewed by telephone using semi-structured questions. Each interview was tape-recorded and transcribed for analysis.

Data Collection

Methods of data collection are described for the quantitative phase of the study followed by the data collection in the qualitative phase. The quantitative phase involved the use of a survey instrument, while the qualitative data was collected using semi-structured interviews.

Quantitative Instrument

The Institute for Higher Education Policy (Institute for Higher Education Policy, 2000) survey consists of 24 benchmarks grouped into seven broader categories of: institutional support, course development, teaching/learning, course structure, student support, faculty support, and evaluation and assessment. Some of these benchmarks are institutionally controlled while others are instructor controlled. The original Institute for Higher Education Policy (IHEP) study asked participants to rate both the presence and

importance of each benchmark. In this study, participants were asked to rate the presence of the 24 benchmarks in their institution. IHEP survey questions were not modified and are being used with permission of The Institute for Higher Education Policy. The instrument used collected demographic information during the administration of the benchmark survey (see Appendix A).

The trait of quality can be an elusive characteristic to measure with a high degree of validity (Patten, 2002). The ability to define quality distance education is an important element in the effort to establish validity. The research conducted by IHEP helps lessen the problem of the elusiveness of measuring quality. The IHEP benchmark study (Institute for Higher Education Policy, 2000) conducted a comprehensive literature search that reviewed benchmarks for quality that appear in academic literature and organizations compiling some 45 benchmarks in total. They then identified six institutions that are recognized as leaders in quality distance education due to extensive experience. All of the institutions were accredited and offered more than one distance learning degree program. Each campus was visited, and thorough interviews were conducted. A survey was also administered asking the research participant to rate each of the 45 benchmarks on two criteria: (a) the extent of the benchmark's presence in their institutions, and (b) how important the benchmark is in its contribution to quality distance education. After analyzing the quantitative and qualitative data, the study found 24 benchmarks essential to ensure quality online distance education. Due to the use of expert judgments regarding benchmarking, content validity is seen as a strength when attempting to determine quality through the use of the 24 IHEP benchmarks as the survey instrument in this study (Patten, 2002).

Although the IHEP survey has been used in multiple studies, statistical evidence of the reliability of the IHEP survey has not been determined. Internet-based distance education is still a new and growing field of study with limited available reliable instrumentation. Future studies should focus on establishing the reliability and validity of the IHEP benchmark survey.

Qualitative Interview

Qualitative interview questions expanded upon the survey data in the quantitative phase of the study. Questions in the narrative inquiry focused on the boundaries of time: past, present, and future (Clandinin & Connelly, 2000). These questions were: Your colleagues have identified you as an expert in Internet-based education. Why do you think you are considered an expert on your campus? How did you get into the business of Internet-based distance education? Why are you presently involved? What are the most pressing issues for the future of Internet-based distance education? An additional follow-up question was asked via e-mail: Does your university have a technology and/or distance education plan or a strategic plan that addresses distance education campus-wide? If yes, whom should we contact on your campus to get a copy of this plan? If readily accessible, can you provide a link or attach a copy of the plan to this e-mail?

Qualitative protocol can be found in Appendix A.

When addressing the validity of the qualitative aspect of this study, Creswell (2003) suggests that validity is a strength of qualitative research as it provides insight into the accuracy of findings from the vantage point of the research participant. Construct validity, defined as the “collection of related behaviors that are associated in a meaningful way” (Patten, 2002, p. 61), is seen in the clustering of the 24 benchmarks

used in the quantitative study and by asking research participants in the qualitative phase of the study for their perspectives on distance education. Using qualitative data to inform the quantitative data also enhances the content validity of the study (Creswell, 2003; Patten, 2002).

Procedures

The data analysis was composed of two phases, first the collection and analysis of the quantitative data, followed by the qualitative data collection and analysis. The relationship between the quantitative and qualitative data was examined in terms of the elaboration of the quantitative data through the qualitative data.

Quantitative Survey

The quantitative participants were informed of the survey by e-mail and provided with a URL for an electronic version of the survey via e-mail. Three weeks after the survey was sent, an e-mail with a hyperlink was sent to all non-respondents. Two weeks later, a final notice was sent via e-mail with a hyperlink to the survey to all remaining non-respondents. SurveyMonkey software was used to develop and manage the survey responses.

Qualitative Interview

Participants in the qualitative interviews were selected because they were the most frequently identified individuals as experts on their campuses. The pool of experts was obtained from the IHEP benchmark survey that asks research participants to identify one distance education expert on their campus. One expert from each campus was interviewed to obtain qualitative data relating to emerging themes and stories of Internet-

based education. Participants for the qualitative survey were interviewed by telephone. The interviews were audiotaped and transcribed for analysis. Qualitative interviews were assigned numbers upon their receipt.

Data Analysis

The quantitative phase of the study involved a descriptive analysis of the data using the Statistical Package for Social Science (SPSS). SPSS was used to: summarize the data by computing the means and standard deviation, establishing whether there were significant differences between the groups being studied through the use of *t*tests and analysis of variance (ANOVA), and to study relationships among variables.

In the qualitative phase of the study, the data were organized by transcribing the interviews for analysis of its overall content. In a more detailed analysis utilizing the computer software HyperResearch, data were coded and labeled in order to identify emerging institutional and instructional themes.

A five-stage process as described by Onwuegbuzie and Teddlie (2003) was used for data analysis. This involved a sequential analysis of the quantitative data followed by the qualitative data analysis for the purpose of complementarity to enhance, illustrate, and clarify the results from the quantitative analysis with the results of the qualitative analysis (Caracelli & Greene, 1997).

The five stages of analysis involved: data reduction, data display, data transformation, data comparison, and data integration (Onwuegbuzie & Teddlie, 2003). In the data reduction stage, the quantitative data were analyzed using descriptive statistics, *t*tests, and analysis of variance. The qualitative data were analyzed using the

constant comparative method of exploratory thematic analysis (Lincoln & Guba, 1985).

The steps in the thematic analysis were:

1. The interview transcripts were reviewed.
2. Each idea (unit) was specified and listed without categorization.
3. The IHEP benchmarks served as the *a priori* context for creating the thematic categories. However the categorization of each unit was not limited to the benchmarks as new themes emerged from the participants.
4. However, if they were unrelated to the benchmarks, new themes were developed.
5. Finally, the units were reviewed and compared again to ensure appropriate thematic placement.

In the data display stage, the reduced quantitative data were displayed using tables and graphs and the qualitative data were displayed through matrices, tables, and graphs. The data transformation phase involved qualitizing (Tashakkori & Teddlie, 1998) the quantitative data through thematic exploration of the open-ended questions on the survey, identification of campus experts, and the creation of the profile of an administrator/teacher as a position. The qualitative data were quantitized (Tashakkori & Teddlie, 1998) in order to calculate effect size through the development of inter-respondent and intra-respondent matrices (Onwuegbusie & Teddlie, 2003).

In the data comparison stage, the quantitative findings were summarized using mean scores and reviewing the percentage of survey respondents that endorsed the benchmarks as an indication of whether the benchmark was met. The qualitative data were also summarized during data comparison to provide further illumination of the

quantitative findings. Through data integration, interpretations were drawn regarding the meaning of the quantitative and qualitative findings.

Generalizability

The results may be generalizable to other small faith-based institutions offering Internet-based distance education through application of skills, images, and/or ideas generated from the broad themes in the data (Eisner, 1998).

Summary

In summary, this chapter provided information regarding the rationale for the use of a sequential mixed-methods design from a pragmatic research philosophy. An explanation for the use of purposeful sampling procedure was given, as well as data collection using an electronic version of the IHEP survey for quantitative data collection and telephone interviews for the qualitative data collection. Methods for data analysis using SPSS in the quantitative phase and coding using HyperResearch software in the qualitative phases of the study were described. Validity and reliability were addressed, based upon past uses of the IHEP survey and mixed-methods approaches in other studies that lend content validity and reliability to the survey instrument. Issues of generalizability were discussed.

CHAPTER FOUR

RESULTS

Introduction

This chapter provides the results of the quantitative phase of the study followed by the qualitative results. The quantitative and qualitative results are reported separately, and aspects of the data will be compared in order to clarify and illustrate quantitative findings with content from the qualitative interviews.

Quantitative Results

The purpose of this portion of the results section is to present the outcome of the analysis completed on the quantitative data. The quantitative results section includes: a descriptive summary of the results of the survey, statistical analyses of the perceptions of administrators versus teachers on the benchmarks, role identification by position, benchmark perceptions by number of years in higher education and position, teaching compensation and moonlighting, the perceptions of the importance of IBDE by position, and benchmark perceptions by gender.

Benchmark Summary Statistics

The survey (see Appendix A) responses to the 24 benchmarks are summarized (Tables 1 through 7) in an attempt to address research question 1 regarding the extent to which North American Adventist colleges and universities demonstrate quality Internet-

based distance education as measured by the IHEP benchmarks. The 24 benchmarks are items 1-24 on the survey. Each question was asked on a 5-point Likert scale. Response values were assigned as follows: strongly disagree (SD) = 1, disagree (D) = 2, neutral (N) = 3, agree (A) = 4, and strongly agree (SA) = 5. A mean score above 3 (neutral) is viewed as an affirmative response to the benchmark. Respondents were also given the option of answering “I don’t know” to each item, which was not calculated into the mean for the item.

The 24 benchmarks are divided into seven categories: institutional support; course development; teaching/learning; course structure; student support; faculty support; and evaluation and assessment. Some of the benchmarks of institutionally controlled (i.e., institutional support, student and faculty support, and evaluation and assessment) while others are faculty-controlled (i.e., course development, teaching/learning, course structure). Tables 1 to 7 present the summary data to each benchmark question and are clustered together by the above-named categories.

Institutional Support Benchmarks

In the category of institutional support (see Table 1) the respondents ($N = 87$) gave affirmative mean responses to the three benchmarks of having “a technology plan that addresses security and is operational to ensure quality, integrity and validity of information” (item 1), “a reliable delivery system” (item 2), and “a centralized system that provides support for building and maintaining the distance education infrastructure” (item 3) with mean scores of 4.16, 3.95, and 4.14 respectively. In response to the presence of a documented technology plan, 67% of the sample either agreed or strongly agreed, although 15% ($n = 13$) of the participants selected the “I don’t know” option.

Table 1

Summary Statistics for Institutional Support Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Documented technology plan	2 (2%)	8 (9%)	6 (7%)	18 (21%)	40 (46%)	13 (15%)	4.16
Reliable technology delivery system	1 (1%)	7 (8%)	11 (13%)	37 (43%)	24 (28%)	7 (8%)	3.95
Centralized system for distance education	4 (5%)	8 (9%)	4 (5%)	24 (28%)	44 (51%)	3 (3%)	4.14
Total Respondents							87
Skipped these questions							0

Seventy-one percent ($n = 61$) of the sample indicated that they agreed or strongly agreed to item 2 regarding a reliable technology delivery system. On item 3, a centralized system for distance education, 79% of the sample ($n = 68$) responded that they agreed or strongly agreed.

Course Development Benchmarks

In regard to the course development benchmarks (see Table 2) the respondents ($N = 86$) gave affirmative mean score responses to these three benchmarks. Item 4 on the survey addresses having “guidelines for minimum standards used for course development, design, and delivery” with a mean of 3.74 and 64% ($n = 55$) of the respondents answering that they either agree or strongly agree. Item 5 states that instructional materials are reviewed periodically to ensure that they meet program standards, receiving a mean score of 3.62 and 54% ($n = 47$) of the sample indicating

Table 2

Summary Statistics for Course Development Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Guidelines for course development	6 (7%)	12 (14%)	7 (8%)	27 (31%)	28 (33%)	6 (7%)	3.74
Instruction materials are reviewed periodically	5 (6%)	16 (19%)	9 (10%)	20 (23%)	27 (31%)	9 (10%)	3.62
Students are engaged in analysis, synthesis, and evaluation	1 (1%)	3 (3%)	11 (13%)	34 (40%)	31 (36%)	6 (7%)	4.14
Total Respondents							86
Skipped these questions							1

that they agree or strongly agree. Item 6 outlines that courses are designed to require students to engage in analysis, synthesis, and evaluation with a mean of 4.14 and 76% ($n = 65$) of the sample showing that they agree or strongly agree.

Teaching/Learning Benchmarks

The teaching/learning benchmarks (see Table 3) also indicated that the respondents ($N = 84$) gave affirmative mean score responses to each of these three benchmarks. In response to item 7 regarding “student interactions with faculty and other students as an essential course characteristic,” the mean was 4.40 with 60% ($n = 50$) of the sample indicating that they strongly agree and another 27% ($n = 23$) that they

Table 3

Summary Statistics for Teaching/Learning Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Student interaction with faculty and other students	3 (4%)	2 (2%)	4 (5%)	23 (27%)	50 (60%)	2 (2%)	4.40
Student feedback is constructive and timely	3 (4%)	1 (1%)	5 (6%)	33 (39%)	35 (42%)	7 (8%)	4.25
Students are instructed in proper methods of research	2 (2%)	6 (7%)	13 (15%)	26 (31%)	22 (26%)	15 (18%)	3.87
Total Respondents							84
Skipped these questions							3

agree. Item 8 states that feedback to student assignments and questions is constructive and timely and has a mean of 4.25 with 81% ($n = 68$) of the sample indicating that they agree or strongly agree. Item 9, stating that “students are instructed in the proper methods of effective research,” obtained a mean of 3.87 and 57% ($n = 48$) of the sample selecting either agree or strongly agree. It was also noted that on item 9, 18% ($n = 15$) of the respondents indicated that they did not know.

Course Structure Benchmarks

Items 10-13 correspond to the course structure benchmarks (see Table 4). The respondents ($N = 84$) gave mean score affirmative responses to each of these four benchmarks. The benchmark (item 10) stating that “students are advised about the program to determine self-motivation and minimal technology requirements” had a mean

Table 4

Summary Statistics for Course Structure Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Students are advised to determine self-motivation and minimal technology requirements	6 (7%)	12 (14%)	15 (18%)	20 (24%)	17 (20%)	14 (17%)	3.43
Students are provided materials outlining course objective, concepts, & ideas	0 (0%)	2 (2%)	5 (6%)	22 (26%)	45 (54%)	10 (12%)	4.49
Students have access to sufficient library resources	2 (2%)	3 (4%)	5 (6%)	32 (38%)	40 (48%)	2 (2%)	4.28
Faculty and students agree upon time expectations	2 (2%)	4 (5%)	9 (11%)	27 (32%)	28 (33%)	14 (17%)	4.07
Total Respondents							84
Skipped these questions							3

of 3.43. Although the mean of 3.43 indicates a score above neutral towards agree, it was noted that 56% of the sample did not select agree or strongly agree. Responses to this question show an array of answers with the highest being 24% ($n = 20$) indicating that they agree, followed by strongly agreed at 20% ($n = 17$), the neutral response with 18% ($n = 15$), “I don’t know” at 17% ($n = 14$), 14% ($n = 12$) selecting disagree, and finally 7% ($n = 6$) indicating that they strongly disagree. Item 11 is the benchmark that addresses whether students are provided with supplemental course information that outlines course objectives, concepts, ideas, and learning outcomes. Eighty percent of the sample ($n = 67$)

selected that they agree or strongly agree on item 11 with a mean of 4.49. Item 12 regarding “access to sufficient library resources” had a mean of 4.28 with 86% ($n = 72$) of the sample indicating that they either agree or strongly agree (see Table 4). The last course structure benchmark is item 13 that states whether “faculty and students agree upon expectations regarding time for assignment completion and faculty response.” This received a mean of 4.07 with 65% ($n = 55$) who either agree or strongly agree; however, 17% ($n = 14$) indicated that they did not know.

Student Support Benchmarks

In regard to the student support benchmarks (see Table 5) the respondents ($N = 82$) gave affirmative mean score responses to these four benchmarks. The benchmark found in item 14 has a mean of 4.21 and it states that students receive information about programs, including admissions requirements, financial information, technical and proctoring requirements, and student support services. Item 15 on the survey addresses whether “students are provided with hands-on training and information to aid them in securing material through electronic sources” with a mean of 3.41. Although this mean score is between neutral and agree and the most frequently selected answer was agree (32%), it was also noted that 54% of the sample did not respond that they agreed or strongly agreed. Item 16 states that “students have access to technical assistance, including detailed instructions regarding electronic use, practice sessions prior to the course and convenient access to technical support staff”; received a mean of 3.90, and 59% ($n = 48$) of the sample indicated that they agree or strongly agree. Item 17 outlines that “questions directed to student services personnel are answered accurately and

Table 5

Summary Statistics for Student Support Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Students receive information about program	3 (4%)	2 (2%)	7 (9%)	26 (32%)	35 (43%)	9 (11%)	4.21
Students are provided with hands-on training in securing electronic data	4 (5%)	14 (17%)	13 (16%)	26 (32%)	12 (15%)	13 (16%)	3.41
Students have access to technical support	3 (4%)	7 (9%)	15 (18%)	17 (21%)	31 (38%)	9 (11%)	3.90
Student services answers questions quickly with a secure system to address complaints	3 (4%)	11 (13%)	8 (10%)	17 (21%)	15 (18%)	28 (34%)	3.56
Total Respondents							82
Skipped these questions							5

quickly, with a structured system in place to address student complaints,” with a mean of 3.56. Of interest on this item, 34% ($n = 28$) of the respondents indicated that they did not know.

Faculty Support Benchmarks

On the faculty support benchmarks (see Table 6) the respondents ($N = 83$) gave affirmative mean responses to these four benchmarks. Item 18 on the survey addresses whether “technical assistance in course development is available to faculty, who are encouraged to use it,” with a mean of 4.18 and 75% ($n = 62$) of the respondents

answering that they either agreed or strongly agreed. Item 19 states that “faculty members are assisted in the transition from classroom teaching to online instruction and are assessed during the process,” receiving a mean of 3.41 and 53% ($n = 44$) of the sample indicating that they agree or strongly agree. Item 20 outlines that “instructor training and assistance, including peer mentoring, continues through the progression of the online course,” with a mean of 3.23. Scores on this item spanned from 13% who strongly disagree, to a high of 23% who agree, and 16% who indicated that they did not know.

Table 6

Summary Statistics for Faculty Support Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Technical assistance available to faculty	3 (4%)	6 (7%)	7 (8%)	20 (24%)	42 (51%)	5 (6%)	4.18
Faculty assistance in transition from classroom to online instruction	9 (11%)	13 (16%)	13 (16%)	25 (30%)	19 (23%)	4 (5%)	3.41
Faculty training, assistance and mentoring available throughout course	11 (13%)	11 (13%)	14 (17%)	19 (23%)	15 (18%)	13 (16%)	3.23
Written resources are available to deal with student use of electronic data	11 (13%)	19 (23%)	8 (10%)	18 (22%)	15 (18%)	12 (14%)	3.10
Total Respondents							83
Skipped these questions							4

Item 21 states that faculty members are provided with written resources to deal with issues arising from student use of electronically accessed data, with a mean of 3.10. The most frequently selected response (23%), however, was “disagree” with an additional 13% who strongly disagree, 10% were neutral, and 14% indicating that they did not know.

Evaluation and Assessment Benchmarks

In the last benchmark category of evaluation and assessment (see Table 7) the respondents ($N = 83$) gave affirmative mean responses to these three benchmarks. Item 22 states that the “program’s educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards,” with a mean of 3.60 and 52% ($n = 43$) of the respondents answering that

Table 7

Summary Statistics Evaluation and Assessment Benchmarks

Benchmarks	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree	Don't Know	Mean
Evaluation process in place	6 (7%)	10 (12%)	11 (13%)	22 (27%)	21 (25%)	13 (16%)	3.60
Data used to evaluate program effectiveness	6 (7%)	17 (20%)	5 (6%)	16 (19%)	15 (18%)	24 (29%)	3.29
Learning outcomes are reviewed regularly	6 (7%)	10 (12%)	10 (12%)	20 (24%)	22 (27%)	15 (18%)	3.62
Total Respondents							83
Skipped these questions							4

they either agreed or strongly agreed. However, 16% ($n = 13$) indicated that they did not know. Item 23, “Enrollment, costs, and successful/innovative uses of technology are used to evaluate program effectiveness,” received a mean score of 3.29. The most frequently given answer to item 23 was “I don’t know” with 29% ($n = 24$) of the sample, followed by 20% ($n = 17$) indicating that they disagree. Item 24 outlines that “intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness,” with a mean of 3.62 and 51% ($n = 42$) of the sample showing that they agree or strongly agree, while 18% ($n = 15$) did not know.

Future Distance Education Plans

Respondents were asked (item 37) to indicate their institution’s future plans regarding Internet-based distance education in terms of whether they plan to increase, decrease, or stay the same over the next 3 years. Participants were also given the option of selecting “I don’t know.” Figure 2 shows that 77% of the sample ($N = 82$) stated that their institution’s plan was to increase online distance education over the next 3 years, while none reported that they intended to decrease.

Importance of Internet-based Distance Education

Item 38 asked participants to rank how important they felt Internet-based distance education is for the future success of their institution on a 5-point scale with 1 = not important, 2 = slightly important, 3 = important, 4 = somewhat important, 5 = very important. Figure 3 shows that the majority of the respondents, 54% ($n = 44$), indicated that Internet-based distance education was very important to their school’s future success.

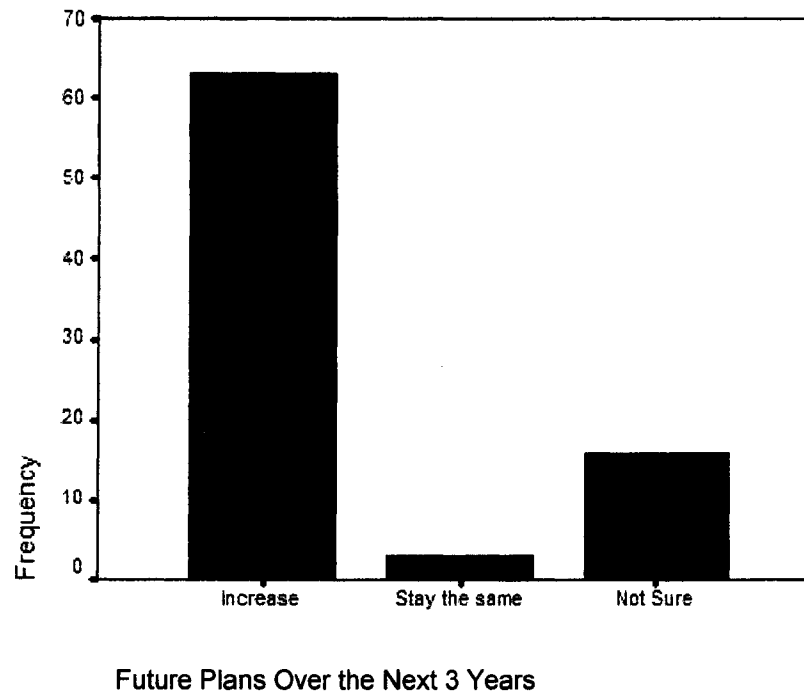


Figure 2. Institutional plans for Internet-based distance education over the next 3 years

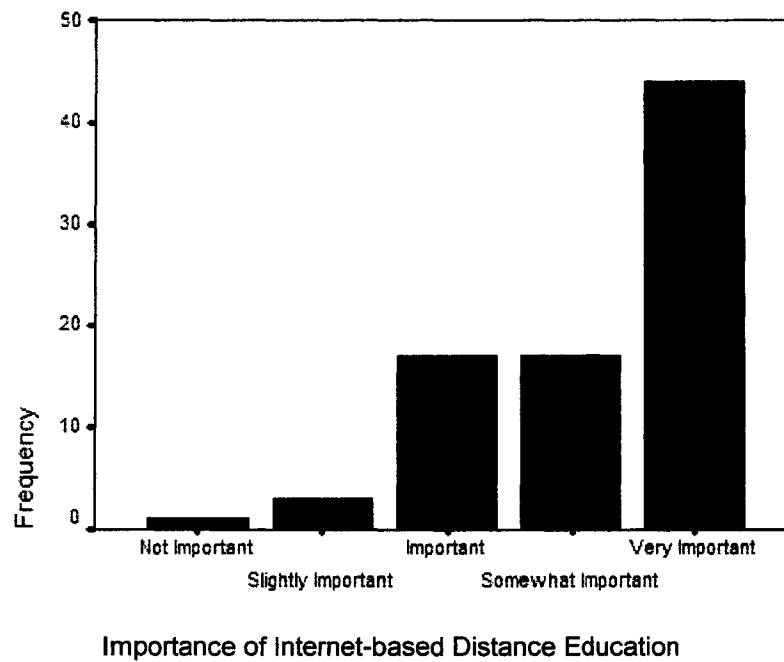


Figure 3. Importance of Internet-based distance education (IBDE) to future institutional success.

Benchmark Perceptions by Position

This section describes the results of the analyses performed on the perceptions of the survey respondents by position. The positions of administrators versus teachers were analyzed on the following benchmark perceptions: institutional support, course development, teaching/learning, course structure, student support, faculty support, and evaluation and assessment. This section will also describe the identification of an additional position of administrator/teacher and the results of the analyses performed using this added position.

Administrator Versus Teacher Perceptions

In order to determine whether differences were present in the responses to the benchmarks by position, tests were conducted to compare the scores of administrators and teachers. Values were assigned to participant responses on a scale with strongly disagree (SD) = 1, disagree (D) = 2, neutral (N) = 3, agree (A) = 4, and strongly agree (SA) = 5. If a respondent answered “I don’t know,” a score of 6 was assigned and was given a missing data value so that it would not be added to the scoring on the 5-point Likert scale which accounts for the variability in sample size for teachers and administrators on any given item. The number of “I don’t know” responses ranged from as low as 12 respondents, to as high as 30. The 24 benchmarks are items 1 – 24 on the survey and are divided into seven topical categories: institutional support (ISB), course development (CDB), teaching/learning (TLB), course structure (CSB), student support (SSB), faculty support (FSB), and evaluation and assessment (EAB). The 24 items were re-coded to create seven new variables that reflect the 24 benchmarks in the seven categories listed above.

The respondents were categorized by teacher or administrator based upon the request from the institutions for all teachers who taught online and individuals in the specific administrative positions of president; vice-president of academics, finance, and enrollment; directors of distance education and information technology. Each institution's ADEC representative was also requested as an administrative category; however, every ADEC representative who answered the survey was also in one of the other administrative categories. The list submitted by each institution identified the respondents by their administrative position or as a teacher.

Perceptions on the institutional support benchmarks. Items 1 – 3 correspond to the institutional support benchmarks whose scores on these three items were added together to create a new variable “ISB” whose scores could range from as low as 3 (a respondent who strongly disagrees on all three items) to a high of 15 (someone who strongly agrees on all three items). A *t* test was used in order to see whether teachers and administrators' perceptions differ on the institutional support benchmarks. The results indicated that the mean for the 28 administrators was 12.43, with a standard deviation of 2.35; for the 41 teachers the mean score was 12.27 with a standard deviation of 2.78. Results of the *t* test (*df* = 67) showed a *t* value of .25, *p* = .92, indicating that there is not a statistically significant difference between teachers and administrators in regard to scores on the institutional support benchmarks.

Perceptions on the course development benchmarks. In order to create the variable “CDB” representing the course development benchmarks, the scores for items 4-6 were added together with a score ranging from a low of 3 (strongly disagree) to a high

of 15 (strongly agree). A t test was used to compare the scores of teachers and administrators on the variable “CDB.” The mean for the 29 administrators sampled was 11.24 with a standard deviation of 3.28; for the 44 teachers the mean score was 11.57, with a standard deviation of 3.02. The t test revealed a $t(71) = -.44$, $p = .32$. This indicates that there is not a statistically significant difference between teachers and administrators in regard to scores on “CDB.”

Perceptions on the teaching/learning benchmarks. Adding the scores on items 7-9, which corresponded to the teaching/learning benchmarks, produced the variable “TLB.” The scores range as low as 3 (strongly disagree), to a high of 15 (strongly agree). To learn whether there was a difference in how teachers and administrators scored on the teaching/learning benchmarks, a t test was run to compare their scores on the variable “TLB”. The mean score for the 23 administrators was 12.43 with a standard deviation of 2.48; while the 43 teachers’ mean score was 12.60 with a standard deviation of 2.27. The t test ($df = 64$) results showed a t value of $-.28$, $p = .95$, indicating that a statistically significant difference in scores does not exist between teachers and administrators on “TLB,” the teaching/learning benchmarks.

Perceptions on the course structure benchmarks. Items 10 - 13 correspond to the variable “CSB” (course structure benchmarks) whose scores on these three items were added together to create this new variable. Scores ranged from as low as 4, indicating that the respondent strongly disagrees, to a high score of 20, indicating that they strongly agree. The mean score for the 20 administrators was 16.30 with a standard deviation of 3.34, while the 39 teachers’ mean score was virtually the same at

16.31 and a standard deviation of 3.06. A t test was used to compare the scores of teachers and administrators on the variable “CSB.” The test results reveal a $t(57) = -01$, $p = .84$, pointing out that a statistically significant difference does not exist.

Perceptions on the student support benchmarks. The variable “SSB” relates to the student support benchmarks found in items 14-17. These combined scores range from as low as 4 (strongly disagree) to a high of 20 (strongly agree). The mean score for administrators ($n = 20$) was 14.55 with a standard deviation of 4.22; teachers ($n = 27$) had a mean score of 15.44 with a standard deviation of 3.66. It was noted that a high number of respondents ($n = 30$) selected the “I don’t know” option that accounts for the drop in sample size for teachers and administrators. In order to reveal whether there was a difference in how teachers and administrators scored on the student support benchmarks, a t test was performed using variable “SSB.” The results of the t test ($df = 45$) showed a t -value of $-.78$, $p = .75$. The results of the t test do not support the existence of a significant difference between the perceptions of teachers and administrators on “SSB” (student support benchmarks).

Perceptions on the faculty support benchmarks. The combined scores of items 18-21 formed the variable “FSB” (faculty support benchmarks). The scoring for this variable ranges from as low as 4 (a respondent who strongly disagrees), to a high of 20 (a respondent who strongly agrees). To demonstrate whether there was a positional (teacher/administrator) difference in how respondents answered the faculty support benchmarks (FSB), a t test was performed to compare the average scores of teachers and administrators. The administrators’ group contained 26 respondents with a mean score of

13.92 with a standard deviation of 5.15. The 39 teachers had a mean score of 13.56 with a standard deviation of 4.50. The t test ($df = 63$) results showed a t value of .30, $p = .31$. The t test results indicate that there is not a statistically significant difference between teachers and administrators on “FSB.”

Perceptions on the evaluation and assessment benchmarks. The evaluation and assessment benchmarks are contained in items 22–24 which correspond to the variable “EAB” whose scores added together range from as low as 3 (strongly disagree), to a high of 15 (strongly agree). A t test was used to compare the scores of teachers and administrators on the “EAB” variable. The mean for the 23 administrators was 10.26 with a standard deviation of 3.60, while the 27 teachers had a mean score of 10.48 with a standard deviation of 3.64. It was noted that a high number of respondents ($n = 29$) selected the “I don’t know” option that accounts for the drop in sample size for teachers and administrators. The t test revealed a $t(48) = -.22$, $p = .72$, indicating that a statistically significant difference between teachers’ and administrators’ scores in this variable does not exist.

Administrator, Teacher, Versus Administrator/ Teacher Perceptions

In reviewing the data, it was discovered that some administrators had online teaching experience and some teachers had administrative responsibilities such as dean or chairperson of a department. In order to identify this hybrid group of administrators/teachers, a new variable (Admin/Teacher) was created based on responses to items 26 and 32. Item 26 indicated that they currently held at least one of the following administrative positions: president, vice-president, director, dean/chairperson,

or “other,” and item 32 indicated whether the respondent had taught an online course. In order to be included in the variable “Admin/Teacher” the respondent would have indicated that they held an administrative position (item 26) and had taught an online class (item 32).

Since no statistically significant differences were found between the scores of teachers and administrators on the IHEP benchmarks, an analysis was done to determine if a difference would be discovered when accounting for the additional group of “Admin/Teacher.” The variable of “Position 3” was created by first identifying the administrators/teachers, after which the remaining sample kept their original designation as either a teacher or administrator. A one-way analysis of variance was then performed in order to see whether benchmark scores were affected by position when arranged into three categories of teacher, administrator, and administrator/teacher.

The results of the ANOVA can be seen in Tables 8 and 9. Table 8 gives the means and standard deviations on the variables “ISB,” “CDS,” “TLB,” “CSB,” “SSB,” “FSB,” and “EAB.” Table 9 shows that like the *t* tests on the benchmarks by position in two categories (teacher and administrator), the ANOVA performed on these scores also did not indicate a statistically significant difference on the benchmarks by position when viewed from the three categories of teacher, administrator, teacher/administrator.

Role Identification by Position

The purpose of this section is to describe the crosstabulations performed on role identification by position. The roles of visioning, strategic planning, and policy-making

Table 8

Descriptive Statistic for the Analysis of Variance on Benchmark Responses by Position in Three Categories

Benchmarks	Position	N	M	SD
ISB	Administrator	18	12.28	2.59
Institutional	Teacher	33	12.30	2.99
Support	Admin/Teacher	18	12.44	1.85
	Total	69	12.33	2.60
CDB	Administrator	18	11.61	3.68
Course	Teacher	35	11.66	3.12
Development	Admin/Teacher	20	10.90	2.55
	Total	73	11.44	3.10
TLB	Administrator	13	12.00	2.94
Teaching/	Teacher	36	12.67	2.41
Learning	Admin/Teacher	17	12.71	1.57
	Total	66	12.55	2.32
CSB	Administrator	12	15.83	3.79
Course	Teacher	30	16.57	3.15
Structure	Admin/Teacher	17	16.18	2.72
	Total	59	16.31	3.13
SSB	Administrator	9	13.11	5.18
Student	Teacher	21	15.43	4.02
Support	Admin/Teacher	17	15.65	2.69
	Total	47	15.06	3.89
FSB	Administrator	15	14.73	4.88
Faculty	Teacher	32	13.91	4.65
Support	Admin/Teacher	18	12.50	4.78
	Total	65	13.71	4.74
EAB	Administrator	12	10.08	4.10
Evaluation &	Teacher	21	10.57	3.79
Assessment	Admin/Teacher	17	10.35	3.12
	Total	50	10.38	3.59

Table 9

Analysis of Variance on Benchmark Responses by Position in Three Categories

Benchmarks		SS	df	M	F	Sig.
ISB	Between Groups	.31	2	.15	.02	.98
Institutional Support	Within Groups	459.03	66	6.96		
	Total	459.33	68			
CDB	Between Groups	8.01	2	4.01	.41	.67
Course Development	Within Groups	685.96	70	9.80		
	Total	693.97	72			
TLB	Between Groups	4.83	2	2.42	.44	.65
Teaching/Learning	Within Groups	347.53	63	5.52		
	Total	352.36	65			
CSB	Between Groups	5.01	2	2.50	.25	.78
Course Structure	Within Groups	563.50	56	10.06		
	Total	568.51	58			
SSB	Between Groups	42.89	2	21.45	1.44	.25
Student Support	Within Groups	653.91	44	14.86		
	Total	696.81	46			
FSB	Between Groups	43.29	2	21.65	.96	.39
Faculty Support	Within Groups	1392.15	62	22.45		
	Total	1435.45	64			
EAB	Between Groups	1.84	2	.92	.07	.93
Evaluation & Assessment	Within Groups	627.94	47	13.36		
	Total	629.78	49			

are first displayed by the positions of administrator versus teacher followed by the crosstabulations of the three positions of administrator, teacher, versus, administrator/teacher.

Administrator Versus Teacher Perceptions

Crosstabulations were performed in order to understand whether there were differences between teachers and administrators in role identification. Item 35 asked participants to check whether they identify with multiple roles including visioning,

strategic planning, and policy-making with regard to distance education. Of the 32 administrators, 69% identified themselves in the visioning role, while only 28% of the 50 teachers identified the role of visioning (see Table 10). In the role of strategic planning (see Table 11), 59% of administrators ($n = 32$) identified this role, whereas 22% of teachers ($n = 50$) identified the role of strategic planning. Table 12 shows 63%, of the 32 administrators identified themselves in the role of policy-making; whereas 24% of the 50 teachers identified this role.

Administrator, Teacher, Versus Administrator/Teacher Perceptions

An additional set of crosstabulations was performed in order to understand whether there were differences in role identification by position when the additional category of administrator/teacher was taken into account. Item 35 asked participants to check whether they identify with multiple roles including visioning, strategic planning, and policy-making with regard to distance education. Of the 21 administrators, 57% identified themselves in the visioning role, while 24% of the 41 teachers identified the role of visioning, while 70% of the 20 administrators/teachers identified with the role of visioning (see Table 13). In the role of strategic planning (see Table 14), 57% of administrators ($n = 21$) identified this role, with 15% of teachers ($n = 41$) identifying the role of strategic planning, and 60% of the administrators/teachers ($n = 20$) identified this role. Table 15 shows that 52% of the 21 administrators identified themselves in the role

Table 10

Crosstabulation for the Role Identification of Visioning by Position in Two Categories

		Roles-Visioning		Total
		No	Yes	
Position-2 Categories	Administrator	10 (31%)	22 (69%)	32 (100%)
	Teacher	36 (72%)	14 (28%)	50 (100%)
Total		46 (56%)	36 (44%)	82 (100%)

Table 11

Crosstabulation for the Role Identification of Strategic Planning by Position in Two Categories

		Roles-Strategic Planning		Total
		No	Yes	
Position-2 Categories	Administrator	13 (41%)	19 (59%)	32 (100%)
	Teacher	39 (78%)	11 (22%)	50 (100%)
Total		52 (63%)	30 (37%)	82 (100%)

Table 12

Crosstabulation for the Role Identification of Policy-Making by Position in Two Categories

		Roles-Policy-Making		Total
		No	Yes	
Position-2 Categories	Administrator	12 (37%)	20 (63%)	32 (100%)
	Teacher	38 (76%)	12 (24%)	50 (100%)
Total		50 (61%)	32 (39%)	82 (100%)

Table 13

Crosstabulation for the Role Identification of Visioning by Position in Three Categories

		Roles-Visioning		Total
		No	Yes	
Position-3 Categories	Administrator	9 (43%)	12 (57%)	21 (100%)
	Teacher	31 (76%)	10 (24%)	41 (100%)
	Admin/Teacher	6 (30%)	14 (70%)	20 (100%)
Total		46 (56%)	36 (44%)	82 (100%)

Table 14

Crosstabulation for the Role Identification Strategic Planning by Position in Three Categories

		Roles-Strategic Planning		Total
		No	Yes	
Position-3 Categories	Administrator	9 (43%)	12 (57%)	21 (100%)
	Teacher	35 (85%)	6 (15%)	41 (100%)
	Admin/Teacher	8 (40%)	12 (60%)	20 (100%)
Total		52 (63%)	30 (37%)	82 (100%)

Table 15

Crosstabulation for the Role Identification of Policy-Making by Position in Three Categories

		Roles-Policy-Making		Total
		No	Yes	
Position-3 Categories	Administrator	10 (48%)	11 (52%)	21 (100%)
	Teacher	35 (85%)	6 (15%)	41 (100%)
	Admin/Teacher	5 (25%)	15 (75%)	20 (100%)
Total		50 (63%)	32 (39%)	82 (100%)

of policy-making, while 15% of the 41 teachers identified this role, and 75% of the administrators/teachers identified with the policy-making role. In all three roles (visioning, strategic planning, and policy-making), a higher percentage of administrators/teachers identified these roles, followed by administrators, and teachers identified these roles with the lowest percentages in each role. This will be discussed further in chapter 5.

Benchmark Perceptions by Number of Years in Higher Education and Position

The survey (see Appendix A) included an item asking the participants to indicate the number of years they have spent working in higher education. Item 28 asked participants to indicate the number of years spent working in higher education with values of 1 = 1-5 years, 2 = 6-10 years, 3 = 11-15 years, 4 = 16-20 years, 5 = 21-30 years and 6 = 30+ years. In order to create the variable “years in HE” item 28 was recoded to three levels so that 1 = 1-10 years, 2 = 11-20 years, and 3 = 21+ years. In order to test whether a difference exists between the scores of respondents on the benchmarks by the three levels of experience and two positions, scores on the benchmark variables “ISB,” “CDB,” “TLB,” “CSB,” “SSB,” “FSB,” and “EAB” were compared by position (teacher or administrator) and years of experience (variable “years in HE”). A 3 x 2 ANOVA was performed using the seven benchmarks as the dependent variable and the years of experience of administrators and teachers as one independent variable. Of the seven 3 x 2 ANOVA tests run, only the course development benchmarks were found to be statistically significant.

Table 16 shows the mean score of 9.86 for the seven administrators with 1-10 years of experience in higher education ($SD = 2.73$). The mean score for the 13 administrators with 11-20 years in higher education is 10.77 ($SD = 3.59$). Administrators ($n = 7$) with more than 21 years of experience in higher education had a mean score of 12.71 with a standard deviation of 2.98. Teachers ($n = 16$) with 1-10 years of experience had a mean score of 13.13, $SD = 1.89$. The mean score for teachers ($n = 20$) with 11-20 years of experience is 11.10 with a standard deviation of 2.92. Teachers with more than 21 years of experience in higher education ($n = 8$) had a mean score of 9.63 with a standard deviation of 3.81. The 3 x 2 ANOVA demonstrated (see Table 17) that these scores resulted in an $F(df = 2)$ value of 4.88, $p = .01$, demonstrating a between-subject effect that was statistically significant. The mean scores for teachers and administrators with 1-10, 11-20, and more than 21 years of experience in higher education have been graphed in Figure 4. The lowest possible score for “CDB” was 3, indicating that the respondent strongly disagreed and a high of 15 indicating that they strongly agreed that the benchmarks for quality course development were demonstrated in their institutions. Teachers with 1-10 years in higher education and administrators with more than 21 years of experience had the highest mean scores, indicating that they more strongly agreed that the benchmarks for quality were present in their institutions, while the lowest mean scores were the teachers with more than 21 years in higher education, and administrators with 1-10 years of experience. These finding will be discussed in chapter 5 of this study.

Table 16

Descriptive Statistics for the 3 x 2 Analysis of Variance for Course Development Benchmarks (CDB), Years in Higher Education (HE) and Position in Two Categories

Position-2 Categories	Years in HE	M	SD	N
Administrator	1-10 Years	9.86	2.73	7
	11-20 Years	10.77	3.59	13
	21+ Years	12.71	2.98	7
	Total	11.04	3.30	27
Teacher	1-10 Years	13.13	1.89	16
	11-20 Years	11.10	2.92	20
	21+ Years	9.63	3.81	8
	Total	11.57	3.01	44
Total	1-10 Years	12.13	2.62	23
	11-20 Years	10.97	3.15	33
	21+ Years	11.07	3.69	15
	Total	11.37	3.11	71

Table 17

The 3 x 2 ANOVA for Course Development Benchmarks (CDB), Years in Higher Education (HE) and Position in Two Categories

Source	Type III SS	df	M	F	Sig.
Corrected Model	108.46(a)	5	21.69	2.47	.04
Intercept	7522.59	1	7522.59	857.81	.00
Position-2 Categories	.43	1	.43	.05	.83
Years in HE	3.73	2	1.87	.21	.81
Position-2 Categories * Years in HE	85.53	2	42.77	4.88	.01
Error	570.09	65	8.77		
Total	9851.00	71			
Corrected Total	678.48	70			

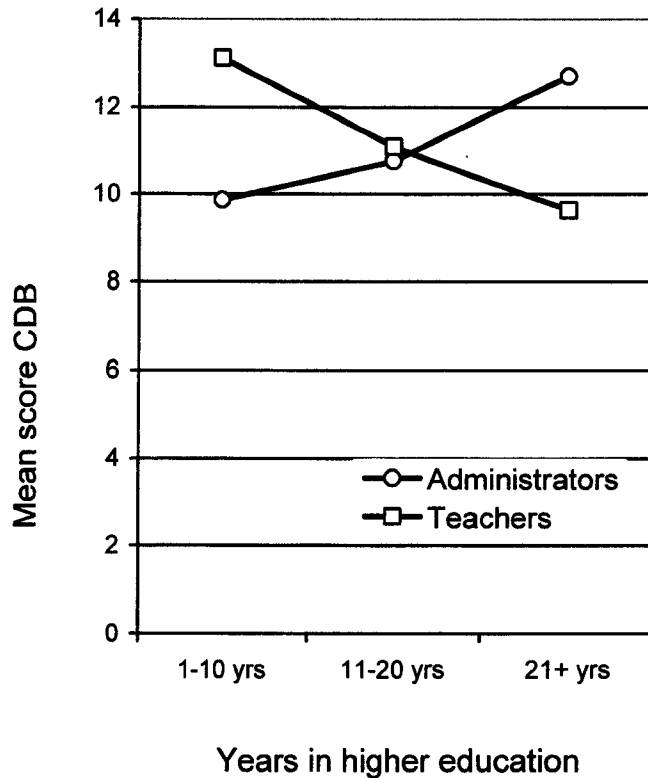


Figure 4. Tests of between-subject effect for course development benchmarks (CDB), years in higher education (HE) and position in two categories.

Teaching Compensation and Moonlighting

A crosstabulation (see Table 18) was performed in order to understand the relationship between teaching compensation and the respondent's consideration to moonlight as an online teacher for another institution. Items 33 asked participants who have taught online whether they receive additional pay for online teaching. Item 34 asked if they had considered teaching online courses for an institution other than their current employer. Of the 58 respondents sampled, 64% ($n = 37$) indicated that they received additional compensation for their online teaching and 36% ($n = 21$) indicated that they were not receiving additional pay. Of the 37 respondents who were compensated for their

online teaching, 51% ($n = 19$) had not taught for another institution nor indicated that they had considered moonlighting, while 8% ($n = 3$) had taught for another institution, and 41% ($n = 15$) had considered moonlighting for another institution. Of the 21 respondents who were not compensated additionally for their online teaching, 38% ($n = 8$) had not taught for another institution nor indicated that they had considered moonlighting, while 5% ($n = 1$) had taught for another institution, and 57% ($n = 12$) had considered moonlighting for another institution. The majority (62%) of respondents who were not compensated additionally for their teaching either had taught for another school or were considering teaching for another institution.

Table 18

Crosstabulation for Compensation and Moonlighting

		Moonlighting			Total
		No	Yes	Considered	
Compensation	Yes	19 (51%)	3 (8%)	15 (41%)	37 (64%)
	No	8 (38%)	1 (5%)	12 (57%)	21 (36%)
Total		27 (46.5%)	4 (7%)	27 (46.5%)	58 (100%)

Perceptions of the Importance of Internet-based Distance
Education by Position

This section reports the perceptions of the importance of Internet-based distance education by position. First the positions of administrator versus teacher are presented followed by the positions of administrator, teacher, versus administrator/teacher.

Administrator Versus Teacher Perceptions

The survey participants were asked to rank the importance of Internet-based distance education to the future success of their institution, item 38 (see Appendix A). The values assigned to the responses to this question were 1 = not important, 2 = slightly important, 3 = important, 4 = somewhat important, and 5 = very important. In order to see whether teachers and administrators respond differently in their opinion about the importance of Internet-based distance education, a *t* test was run to compare their scores. The 32 administrators had a mean score of 3.97 with a standard deviation of 1.15, and the 50 teachers had a mean score of 4.38 with a standard deviation of .83 (see Table 19). Refer to Table 20 where the *t* test revealed $t(df = 80) = -1.88, p = .02$. Due to this outcome ($p = .02$) the Levene's test calculated the findings with the assumption that equal variances were not assumed, revealing $t(df = 51.52) = -1.75; p(2\text{-tailed}) = .09$. This indicates that there is not a statistically significant difference between teachers and administrators in their scores on the importance of Internet-based distance education.

Administrator, Teacher, Versus Administrator/Teacher Perceptions

A one-way analysis of variance was then performed to test the same hypothesis by position in three categories (teacher, administrator, admin/teacher). Table 21 shows that the mean scores for administrators ($n = 21$) is 3.86, $SD = 1.20$, followed by teachers ($n = 41$) with a mean score of 4.46, $SD = .79$, and the mean of 4.10 for

Table 19

t-Test Group Statistics for the Importance of Internet-based Distance Education (IBDE) by Position in Two Categories

	Position-2 Categories	N	M	SD	SE Means
Importance of IBDE	Administrator	32	3.97	1.15	.20
	Teacher	50	4.38	.83	.12

Table 20

t-Test for the Importance of Internet-based Distance Education by Position in Two Categories

		Levene's Test for Equality of Variances		t test for Equality of Means				
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	SE Difference
Importance of IBDE	Equal variances assumed	5.63	.02	-1.88	80	.06	-.41	.22
	Equal variances not assumed			-1.75	51.52	.09	-.41	.24

administrators/teachers ($n = 20$) with $SD = 1.02$. Table 22 shows that the ANOVA performed on these scores resulted in an F ($df = 2$) value of 2.98, $p = .06$, indicating the presence of a trend among these three groups (see Table 21) with teachers reporting Internet-based distance education as more important than administrator/teachers and administrators reporting the lowest mean scores for importance.

Table 21

Descriptives for the Analysis of Variance on the Importance of Internet-based Distance Education by Position in Three Categories

Position	N	M	SD
Administrator	21	3.86	1.20
Teacher	41	4.46	.79
Admin/Teacher	20	4.10	1.02
Total	82	4.22	.98

Table 22

Analysis of Variance for the Importance of Internet-based Distance Education by Position in Three Categories

	SS	Df	MS	F	Sig.
Between Groups	5.48	2	2.74	2.98	.06
Within Groups	72.57	79	.92		
Total	78.05	81			

Benchmark Perceptions by Gender

Although this study does not have gender as a specific focus area, unexpected findings emerged regarding differences between the perceptions of the men and women in the study. In order to discover whether there was a gender difference in how research participants responded to the benchmarks (variables: ISB, CDB, TLB, CSB, SSB, FSB, and EAB), a *t* test was performed to compare the average mean score between men and women (see Table 23). Higher mean scores indicate that they more strongly agree, while lower means scores indicate that they more strongly disagree. Tests were run on seven benchmark groups with five of the seven demonstrating statistical significance.

Table 23

t Test for Benchmark Responses by Gender

Benchmarks	Gender	N	M	SD	t	df	Sig. (2-tailed)
Institutional Support (ISB)	Male	44	12.14	2.53	-.66	64.00	.51
	Female	22	12.59	2.87			
Course Development (CDB)	Male	40	10.23	2.90	-3.84	69.00	.00**
	Female	31	12.84	2.78			
Teaching/ Learning (TLB)	Male	37	11.95	2.38	-2.45	64.00	.02*
	Female	29	13.31	2.05			
Course Structure (CSB)	Male	34	15.56	3.59	-2.39++	54.00++	.02*
	Female	25	17.32	2.04			
Student Support (SSB)	Male	28	14.00	4.41	-2.68++	42.44++	.01*
	Female	19	16.63	2.27			
Faculty Support (FSB)	Male	38	13.11	4.48	-1.22	63.00	.23
	Female	27	14.56	5.03			
Evaluation & Assessment (EAB)	Male	32	9.31	3.49	-3.03	48.00	.00**
	Female	18	12.28	2.99			

*p < .05. **p < .01.

++ Levene's test for homogeneity of variance indicated using unequal variance t test for this variable

Perceptions on the Course Development Benchmarks

The results shown in Table 23 indicate that the 40 men had a mean “CDB” score of 10.23 ($SD = 2.90$), and the 31 women had a mean score of 12.84 ($SD = 2.78$). Results of the t test ($df = 69$) showed a t value of -3.84 , $p = .00$ (2-tailed), indicating that there is a statistically significant difference between men and women on “CDB,” the course development benchmarks (see Table 23). The means show that women more strongly agree on the course development benchmarks.

Perceptions of the Teaching/Learning Benchmarks

A t test was used to compare the scores of men and women on the variable “TLB” (see Table 23). The mean for the 37 men sampled was 11.95 with a standard deviation of 2.38; for the 29 women, the mean score was 13.31, with a standard deviation of 2.05. The t test revealed a $t (df = 64) = -2.45$, $p = .02$ (2-tailed). This indicates that there is a statistically significant difference between men and women in regard to scores on the variable “TLB,” the teaching/learning benchmarks. The women’s mean score indicates that they agree more strongly with the teaching/learning benchmark questions.

Perceptions on the Course Structure Benchmarks

On “CSB” the mean score for the 34 men was 15.56 with a standard deviation of 3.59, while the 25 women’s mean score was 17.32 and a standard deviation of 2.04 (see Table 23). A t test was used to compare the scores of men and women on the variable “CSB.” The test results seen in Table 24 reveal a $t (54) = -2.39$, $p = .02$ (2-tailed), showing that a statistically significant difference exists. Female scores were higher on the

course structure benchmarks (variable “CSB) revealing that they more strongly agree than men.

Perceptions on the Student Support Benchmarks

The “SSB” mean score for men ($n = 28$) was 14.00 with a standard deviation of 4.41; women ($n = 19$) had a mean score of 16.63 with a standard deviation of 2.27. It was noted that a high number of respondents ($n = 30$) selected the “I don’t know” option that accounts for the drop in sample size for men and women. In order to reveal whether there was a difference in how men and women scored on the student support benchmarks, a t -test was performed using the variable “SSB.” The results of the t test ($df = 42.44$) showed a t -value of $-.2.68$, $p = .02$ (2-tailed). The results of the t -test seen in Tables 23 support the existence of a significant difference between the perceptions of men and women on “SSB” (student support benchmarks).

Perceptions on the Evaluation and Assessment Benchmarks

On the evaluation and assessment benchmarks (variable “EAB) the mean for the 32 men was 9.31 with a standard deviation of 3.49, while the 18 teachers had a mean score of 12.28 with a standard deviation of 2.99 (see Table 23). It was noted that a high number of respondents ($n = 29$) selected the “I don’t know” option that accounts for the drop in sample size. The t test revealed a $t(48) = -.3.03$, $p = .00$, indicating that there is a statistically significant difference between the scores for men and women on the evaluation and assessment benchmarks (see Table 23).

Qualitative Results

This section discusses the analysis of the qualitative data obtained from interviews done with Internet-based distance education experts from nine different Adventist colleges/universities and the qualitative data gleaned from the additional comments section of the online survey. Of the nine experts, two were women, eight were from professional programs, six were administrator/teachers, and three were teachers. Ten meta-themes emerged as a result of the analysis. The first seven meta-themes are discussed as they relate to the broader categories of institutional-controlled benchmarks and faculty-controlled benchmarks (see definitions in chapter 2) and the themes from which they were developed. The remaining three meta-themes of prevailing attitudes of distance education, system collaboration, and the qualities of an expert are discussed in relation to the themes from which they were developed. An exploratory thematic analysis of the data has been included as well as various tables that describe the endorsement sizes of specific themes.

Exploratory Thematic Analyses

The qualitative data were analyzed using the constant comparative method (Lincoln & Guba, 1985) that led to the development of 17 broad emerging themes that were further reduced to 10 meta-themes. The IHEP benchmarks (Institute for Higher Education Policy, 2000) served as an a priori context to examine the extent to which the participants were discussing ideas relevant to the benchmarks, but the development of themes was not limited to the benchmarks. Within these 17 themes, those that emerged relating to the institutional-controlled benchmarks included: evaluation and assessment, faculty training, course management issues, student access, student services, financial

challenges, and vision/mission/strategic planning. Consistent with the literature on the IHEP benchmarks (Institute for Higher Education Policy, 2000) these nine themes were clustered into the four meta-themes of faculty support, institutional support, evaluation and assessment, and student support. The themes that related to the faculty-controlled benchmarks included: course structure, interactivity and community, teaching theories and methods, quality-control guidelines, and curriculum development and design. These five themes were clustered into the three meta-themes of course structure, teaching and learning, and course development.

Additional meta-themes that emerged were prevailing attitudes, system collaboration, and qualities of an expert. The meta-theme of prevailing attitudes was constructed from the broader themes of brick and mortar mentality and brick and click mentality. The systems collaboration meta-theme was constructed from the two themes of barriers to collaboration and opportunities for collaboration.

The qualitative data were transformed by quantizing (Tashakkori & Teddlie, 1998) the data through the use of inter-respondent and intra-respondent matrices (Onwuegbuzie & Teddlie, 2003). This process was used in order to develop descriptive statistics regarding the emphasis and endorsement given to the emerging themes by the research participants. In order to create the intra-respondent matrix (i.e., unit x theme) the data were binarized (Onwuegbuzie & Teddlie, 2003) where each idea (unit) was converted to a score of 1 or 0. A score of “1” was given if the unit was represented in one of the 17 broad themes, whereas a score of “0” was given if the unit was not represented within a theme. The inter-respondent matrix (i.e., participant x theme) was constructed by assigning the score of “1” to participants who endorsed a given theme and a score of “0”

if the participant did not endorse the theme. The quantitizing of the themes made it possible to compute the manifest effect sizes (Onwuegbuzie & Teddlie, 2003) of the data.

As described by Onwuegbuzie and Teddlie (2003) two types of manifest effect size were calculated. The frequency effect size was obtained by computing the frequency of a theme within a sample using the intra-responder matrix. The intensity effect size was calculated by converting the number of units in each theme to a percentage. The results of the computation of the manifest effect size are illustrated in Table 24.

Table 24

Manifest Effect Size and Frequency Distribution for the 10 Meta-themes Associated With Perceptions of Adventist Internet-Based Distance Education

Category Number	Meta-themes	Number of themes within each meta-theme	Frequency of Occurrence (Units)	Intensity Effect Sizes (% of total)
1	Institutional Support	2	73	20.2
2	Faculty Support	2	39	10.8
3	Student Support	2	18	5.0
4	Evaluation & Assessment	1	5	1.4
5	Teaching/Learning	2	59	16.3
6	Course Development	2	22	6.1
7	Course Structure	1	6	1.7
8	Prevailing Attitudes of DE	1	34	9.4
9	System Collaboration	2	33	9.1
10	Qualities of Expert	2	72	19.9
Total	10 Overall Meta-Themes	17	361	100.0

Additional effect sizes were computed using the inter-responder matrix to determine the percentage of participants who endorsed each theme. Table 25 represents the percentage of the participants' endorsement of the meta-themes. When reviewing Table 25 it is interesting to note that 9 of the 10 meta-themes were endorsed from 55.6%

to 100% of the participants. The meta-theme of course structure, however, was only endorsed by 22.2% of the participants. Although the meta-theme of qualities of the expert is endorsed by the entire sample, it is important to note that each participant was specifically asked to speculate about why their peers identified them as an expert accounting for the 100% endorsement rate.

Table 25

Participants Meta-Theme Endorsement

Benchmark Meta-Themes	Percentage
Institutional Support	100.0
Faculty Support	88.9
Student Support	88.9
Evaluation & Assessment	55.6
Teaching/Learning	77.8
Course Development	88.9
Course Structure	22.2
Additional Meta-Themes	Percentage
Prevailing Attitudes of DE	100.0
System Collaboration	66.7
Qualities of Expert	100.0

When using Tables 24 and 25 in tandem, the weightiness of the themes is demonstrated via effect size. For example, the meta-theme of institutional support accounts for over 20% (see Table 24) of the units and was discussed by all of the interviewees (see Table 25). Consequently, this meta-theme can be characterized as being talked about a great deal by many participants. The meta-theme of evaluation and assessment, although it receives a high endorsement rate of 55.6% (see Table 25) of the sample, constitutes only 1.4% (see Table 24) of the intensity effect size and might be seen as being discussed a little by a moderate number of participants. The course

structure meta-theme is an example of an idea that is discussed very little with an intensity effect size of 1.7% (see Table 24) by very few participants with an endorsement percentage of 22.2% (see Table 25).

Calculating manifest effect size is valuable in this study in order to: (a) leave an audit trail; (b) compare the qualitative data with the quantitative data; and (c) account for and represent small outlying themes in addition to prominent themes. Onwuegbuzie and Teddlie (2003) suggest that quantitizing data for statistical analysis is a means to legitimize and assist with the interpretation of mixed-methods results. Miles and Huberman (1994) give three reasons to quantify themes: (a) easy identification of themes; (b) the maintenance of analytical integrity; and (c) hypothesis verification.

Institutional-Controlled Benchmarks

The institutional-controlled benchmarks as defined by this study are those benchmarks for quality that are typically beyond the instructor's control and more under the control of the institution. They include: institutional support, student support, faculty support, and evaluation and assessment (Sparrow, 2002). In this section, the meta-themes of institutionally controlled benchmarks will be discussed as they relate to the themes from which they originated. The thematic structure pertaining to the institutional-controlled benchmarks used for this discussion is represented in Figure 5.

Institutional Support

Interestingly, the meta-theme of institutional support is one of only two meta-themes that were endorsed by all those interviewed (see Table 25) and had the highest intensity effect size of 20.2% (see Figure 5). This meta-theme emerged as participants

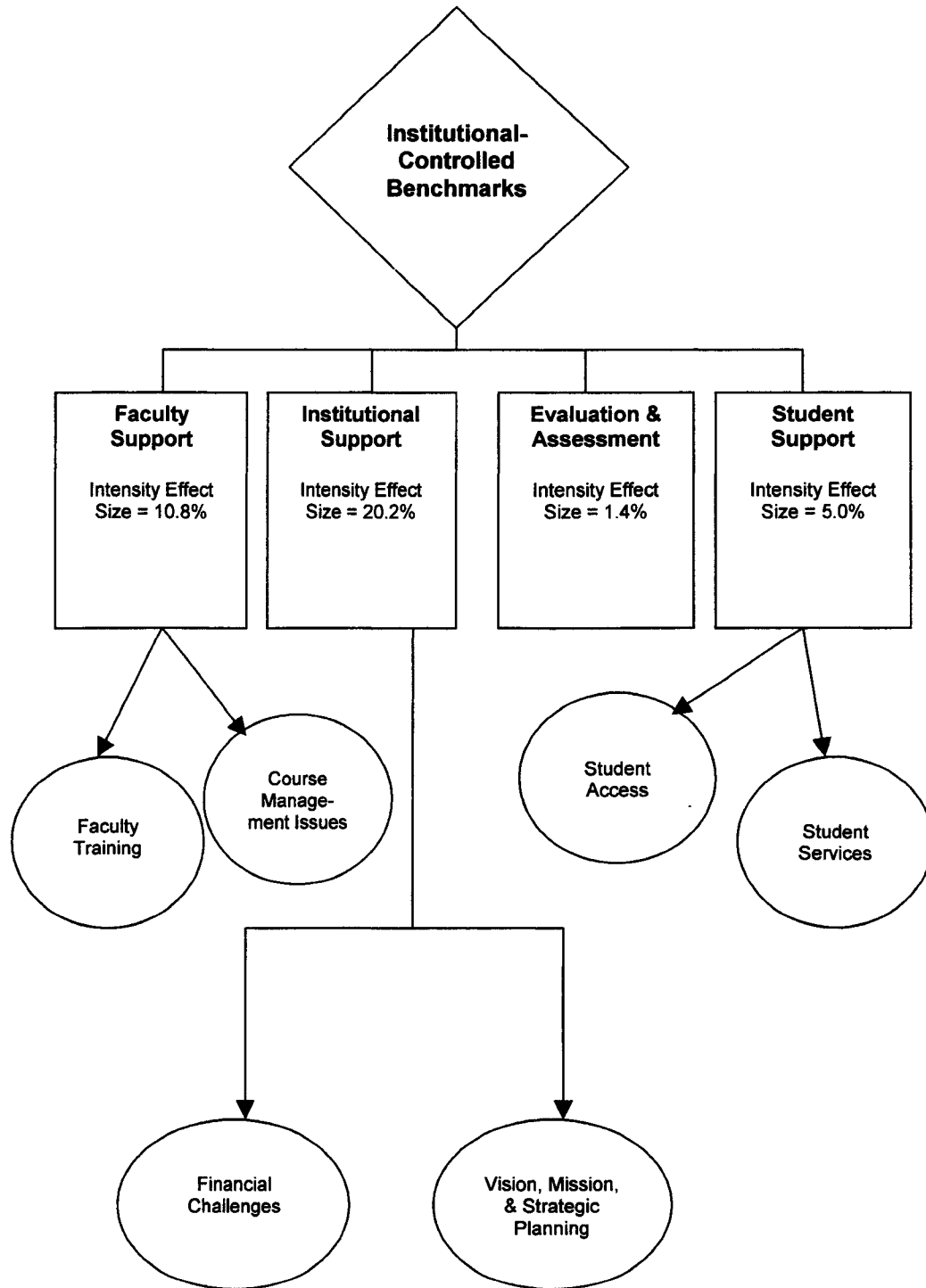


Figure 5. Thematic structure pertaining to institutional-controlled benchmarks.

Table 26

*Participant Sub-Theme Endorsement:
Institutional Support*

Institutional Support Sub-Themes	Percentage
Vision, Mission, & Strategic Planning	100.0
Financial Challenges	100.0

shared their stories about current participation in Internet-based distance education or what they thought were pressing needs for the future of distance education. Participant comments represent two sub-themes, vision, mission, strategic planning and financial challenges, both of which were endorsed 100% by participants (see Table 26).

Vision, mission and strategic planning. Institutional vision is what drives an institution's mission and strategic planning. It is the spark that ignites the creativity in any planning effort. Interviewees shared rather vigorously their thoughts about the collective vision of Adventist education in general and visioning for Internet-based distance education in particular. Two individuals were very concerned with the changing demographics and commitments of young Adventists to Adventist education. One teacher discussed this in generational terms:

I know my parent's generation, the World War II generation, would die for God, Country, and the Seventh-day Adventist church. I can't say I am like that and I know my brother's son, a junior in high school, won't say that. He is already looking at a state university that is close to home, where there are world-class teachers and he won't have to work extra hours to pay all that tuition.

Another interviewee echoed similar thoughts and advocated for Adventist education to become proactive and start integrating online teaching so we can continue to educate our own members.

One interviewee shared his thoughts about Internet-based distance education as part of an Adventist institutional mission just because the Internet could provide international access to education. He maintained that worldwide access to education is still inequitable because only a portion of the world is able to access the Internet in an affordable way.

The visions shared by interviewees regarding possibilities of Internet-based distance education in institutions were exciting. Collaborative partnerships, degreed and certificate programs, corporate trainings, and marketing to high-school students were shared as current realities and/or future potentials for online education in institutions. One enthusiastic interviewee shared possible online opportunities in the professional community, from teacher certificate programs to working with the military. He felt that the challenges ahead in Internet-based distance education are only about lack of vision. Other markets for online education include marketing to Adventist higher schools so that students would have a whole year, half-year, or semester's worth of college before arriving on campus. One participant intimated that institutional vision and need of higher enrollments might be solved with intentional, well-planned online education. Finally, one mid-level administrator shared his personal vision for a central organizational structure that would motivate, coordinate, and evaluate online learning for the campus.

It appears that commitment to Internet-based distance education by many upper level administrators is still lukewarm. Interviewees discussed this lack of commitment in the absence of strategic planning for distance education and/or mention of distance education in institutional mission statements.

One teacher said that even though distance education existed on their campus, it was in chaos, a clear indication for him that the institution was just not committed to it. Another interviewee shared his frustration with his institution's approach in creating strategic direction for online distance education while in a crisis. He felt that crisis planning was too late as decisions made are less than optimal. Two upper level administrators demonstrated their own ambivalence regarding future commitment and planning for this type of education by indicating that they did not anticipate their campuses moving into distance education anymore significantly than what was presently being done.

In addition, a lack of commitment to Internet-based education may be demonstrated by the fact that, when asked, just four of the nine participants said strategic plans targeting technology and/or distance education existed in their institutions. Two of those four plans were for specific departments rather than the entire institution. Only two institutions were able to find and send copies of those plans.

Only one administrator/teacher was able to speak specifically about what was in their technology plan by discussing the definition of distance education on campus and describing several goals and projected outcomes that were important to the institution. He was able to send a copy of the plan via e-mail within minutes of the interview. Additionally, it should be noted that there was one institution out of the nine that

references technology in the mission statement but there was no strategic plan for technology to accompany this mission. Two other participants indicated that their institutions are currently in the process of developing technology/distance education plans.

Strategic planning as it related to academic online program planning and management was also described as lacking or poorly maintained. One educator felt that the biggest problem on their campus was relying too much on the e-learning partner to do their academic course planning and faculty support. Another frustrated teacher shared his experience with the chaos of having an e-learning partner manager change about every 6 to 9 months, which resulted in him training all new managers as well as teachers in course development and course management software. Another interviewee felt the problems would be minimized if administration would provide clear guidelines for students and instructors on distance learning offerings. Finally, one enterprising administrator/teacher confessed that he did not mind the lack of structure with regard to distance education on his campus and used it to his advantage. He created several online programs on the fast track rather than jumping through campus political hoops that he felt would have just slowed progress.

One might conclude from the previous comments that distance education is not important to administrators. That is not entirely the case. There are a few administrators in institutions who have been visionary and helpful in advancing distance education. One teacher shared that the president of his institution was the one who initiated funding of a position of distance education at their institution and it was the vice-president of academic administration who initiated and participated in the development of the

institutional strategic plan for distance education. A proactive academic dean, who responded to the quantitative survey, disclosed that she had facilitated tools, budgets, training, and the faculty needed to develop the cyber courses on their campus. And yet another interviewee described that her administration's plan to contract with an e-partner was very helpful--like bringing in a whole other staff. She shared that the e-learning partner with which she works puts the classes online, markets them, and does all the recruiting, making her job of teaching much easier.

A couple of interesting sidelines occurred in the discussion of academic planning as it related to Internet-based distance education. One teacher/administrator shared an unusual experience with an overseas college that showed flexibility in planning collaborative ventures in online distance education programs.

The [Program affiliation in Asia] isn't discipline specific to the programs here because the training requirements for [discipline] in the U.S. have certain strict requirements that the [college in Asia] did not want to address in the same way. But they wanted to affiliate and so our college has developed a similar program that works for them but is called something different.

Lastly, one interviewee unexpectedly provided a website that provided a model of implementing e-learning that might be helpful to institutions as they plan for distance programs. If you are interested in that website the address is:

www.books.bookread.com/brainwork.

Financial challenges. The challenges of changing demographics and enrollment, the rise in the cost of tuition, faculty student ratios, faculty remuneration, and downsizing are all issues that affect the financial well-being of institutions. Interviewees touched on all of these briefly, but had the most to say about faculty hiring, remuneration, and loading as it related to Internet-based education.

One interviewee shared that he thought online education made finding faculty easier because you did not have to hire them full-time, rather you can contract with them any place in the world. He felt that Internet-based distance education would broaden the ability to get qualified faculty.

Faculty loading within distance education had several interviewees weighing in with their opinions and concerns. Some were interested in the issue from a compensation standpoint. For instance, one administrator admitted that they were trying to figure out what constitutes a comparable workload if you do not get a stipend to do an online class. Still others viewed faculty loading as a time management problem and suggested that Internet-based distance education courses cannot be developed with a faculty that is already at a full-time load. A possible solution shared that might impact the loading problem would be that extra time be given in the faculty teaching load for online course creation.

Other institutions are also talking and implementing solutions to the faculty loading problems. One teacher shared that in the past her institution relied heavily upon its full-time faculty to teach the online courses without making on-campus course load adjustments or extra compensation. She revealed that her institution is now in the process of allowing teachers to include online courses as part of their regular load or to teach the online course(s) as a paid extra. Another teacher also described that at his institution they were paid above and beyond their salary for teaching online. It was a contracted wage that was one amount for 10 or more students in a class and a different amount for 25 or more students. One administrator described that at her institution, teaching faculty are paid a contracted wage plus a flat rate per student to teach online.

This is in addition to their regular salaries. They are also paid separately for course development and voice-over videos that are prepared for the class website.

Interviewees recognized that institutions make money on distance education programs. In fact, some believed that money may be the main reason that some institutions get into distance education. One teacher, in the quantitative survey, shared his disdain over this attitude and felt the emphasis should be placed on the needs of faculty rather than counting the money that is made from online education. He did provide further elaboration on specific needs of faculty.

A creative use of online tuition dollars was advocated for by one administrator/teacher. He felt that a portion of the tuition online classes should come back to the department that offered and taught those classes. Then the department could buy more computers or hire staff for faculty support for course development and technical assistance. He indicated he felt that the use of funds in this way was better than compensating faculty members above and beyond their existing salaries.

Cost effectiveness of Internet-based distance education was also discussed among participants. One administrator/teacher spoke to cost effectiveness of Internet-based distance education in comparison to a new building that was being built on his campus at the cost of \$14.1 million dollars. While he agreed that the new building was going to be great, it did not keep him from wondering aloud about how many online students you could teach for that same amount of money. Cost effectiveness of Internet-based distance education would also appear to be the purpose of the comments shared by this upper level administrator in the quantitative survey: “[Distance education] also provides a crucial link for both reducing teacher travel time to meet with students at distance campuses, and

also for reducing adult student travel time for summer education courses.” Several felt that institutions should re-evaluate at their distance education offerings and decide if they are cost effective and give the best education for the dollar.

Any discussion about cost effectiveness of distance education would take into account the costs of new technology and software. Two interviewees spoke to opposite ends of this issue. One teacher was concerned that new technology applications like white board, etc., could not be readily adopted because of their high expense. Conversely, another interviewee boasted on the efficiency and financial savings that his institution was able to find in their new course management software.

As a final point, two teachers asked almost identical questions about the funding of distance education: How do we fund it? Where will the money come from? One teacher, from the comments section of the survey, suggested that if we do not find the money for distance education, “we will have failed in setting the sail for the future of the SDA educational system worldwide with all its needs.”

Faculty Support

The meta-theme of faculty support was endorsed by those interviewed with an intensity effect size of 10.8% (see Table 24). This meta-theme emerged as participants shared their stories about past and current participation in Internet-based distance education or what they thought were pressing needs for the future of distance education. Participant comments in faculty support represent two sub-themes of course management issues, endorsed by 66.7% of participants, and faculty training, endorsed by 77.8% of participants (see Table 27).

Table 27

*Participant Sub-Theme Endorsement:
Faculty Support*

Faculty Support Sub-Themes	Percentage
Course Management Issues	66.7
Faculty Training	77.8

Course management. Course management issues highlighted the difficulty of the teacher's job to teach online and the structure that should be in place to support the efforts of teachers. Interviewees acknowledged that online course management can be time intense and overwhelming, because more time is spent per student than in face-to-face classes. One teacher's account of her own online course illustrated this challenge: "It is intensive to follow my distance students because they study irregularly. I want to give immediate response to them so I tend to engage with each student on a daily or weekly basis."

Grading papers is another challenge for teaching online. Grading was described by interviewees as more cumbersome online because it is harder to grade on a computer monitor than paper. One teacher related his personal experience of trying to teach a course online with minimal structure and assistance from the e-learning partner. He described that his best help for grading, etc., came from a terrific person in technical support right there on his campus.

Understandably, teachers had something to say about course management. One administrator/teacher indicated that course management should be the teacher's domain, and administrators should be concerned with the policies and procedure that support

teachers. Another mid-level administrator admitted that he believed administrators failed to recognize the time commitments needed to create and teach quality online courses.

Faculty training. Interviewee comments in this section centered on pedagogical and technical training infrastructures that would provide ongoing resources to faculty. They declared that faculty training in the use of technology and appropriate online pedagogy was very important and emphasized it as one of the pressing issues for Internet-based distance education.

A respondent in the quantitative survey felt that many faculty members are highly motivated to move to the next level of technological functioning but the logistical support (mainly time) is hard to come by. He believed that faculty who are using Internet-based distance education would say they do not think they are experts in technology and lack time for professional development to increase expertise.

Other barriers to technical competence may be psychological. One mid-level administrator reported that he had one or two faculty who did not understand computers and said that because of their age they were not prepared to learn it now. Another mid-level administrator also reported that a lot of faculty would not come to his technology trainings because they thought they would have to sit next to some know-it-all and just feel dumb.

Not all faculty are reporting technological incompetence. One mid-level administrator boasted about the technical competence of his specific department.

What we have is a pretty unique group. There are five of us and all of us are pretty astute in technology and so we are promoting it. We know that everything in our classes is already technology driven and/or based and I think that keeps us thinking a little bit ahead of other programs.

Training needs should also encompass how technology can be used in course development and teaching. Interviewees felt that even if faculty are technically competent, they may still find it very difficult to even conceptualize what it would be like to build a course and actually teach it online. One teacher mused that her experience had been that faculty think if they do something in a face-to-face classroom it can be done online. This does not always work, which leaves the teacher confused and frustrated. Several interviewees spoke to the need for pedagogical training, but none gave specifics about whether this was happening formally on their campus. One mid-level administrator did indicate that while her faculty had training in the mechanics of course software, they really did not receive adequate training on how to put their lessons together.

Many of those interviewed advocated for the development of appropriate pedagogy for online teaching. One interviewee described lack of pedagogical training as scary and provided this explanation:

It's scary because we don't know how to teach even in face-to-face. Many of us never had pedagogy in school, we just came out of the professions and we just teach. Well, all of a sudden you realize that there are ten different ways to learn and you are only using one or two of them. What about the other eight?

Regardless of formal training, online teachers are finding support and answers to their questions. Interviewees benefit from talking with other online teachers who share ideas in course development and teaching, and work closely with technology departments on campus that assist them. One administrator/teacher declared that it is a goal for their institution to eventually have an expert in technological concerns and online course development in each school or department on campus. Currently, this same institution is

assisting their faculty by trying to connect online teaching faculty to student workers who assist them with technical questions on the use of course management software.

There were other ideas from interviewees about how to train and support faculty to teach online. One mid-level administrator wondered why the institution did not pick up on the notion of hiring a distance-learning specialist to assist instructors, while another administrator/teacher recommended that some sort of center to support faculty was needed over a single specialist.

Most likely, faculty support and training in most Adventist institutions is probably similar to this administrator/teacher description of her department's no-fail training method: just throw teachers into the deep end, show them how to swim, and then have them teach online.

Student Support

The meta-theme of student support was discussed by those interviewed with an intensity effect size of 5% (see Table 25). Participant comments represent two sub-themes: student access, endorsed by 88.9% of participants, and student services, endorsed by 44.4% of participants (see Table 28).

Table 28

*Participant Sub-Theme Endorsement:
Student Support*

Student Support Sub-Themes	Percentage
Student Access	88.9
Student Services	44.4

Student access. Interviewee comments in this sub-theme were centered on the students' need to access higher education in less traditional ways. First, interviewees recognized Internet-based distance education as a new component that opens education to constituencies that otherwise would be marginalized. Face-to-face students have requested and are expecting more online access to syllabi, submitting homework, etc., than they did even 5 years ago. In addition to requests for more web-enhanced classes, interviewees also reported personal experiences where student persistence resulted in new online classes and, in one case, an entire degreed program.

Flexibility may be one reason for student persistence. Interviewees stated that students like online classes because it gives them the flexibility to live their lives. A high level administrator, who gave comments in the quantitative survey, also recognized that students like the flexibility that the online course brings to their schedules.

There were differing opinions on just who was the flexibility-loving learner. One had the perception that, with the exception of a few international students, the vast majority of students taking online courses are usually part of an in-residence program. One interviewee declared that, historically, online students are those that have only one or two course conflicts with graduation or are those students that have conflicts with traditional education, such as the working adult learner who needs to access education after work hours.

Regardless of who the online learner happens to be, it does appear that they are asking for choices in how they access their education. Some institutions have adjusted to student requests by designing online intensive programs and facilitating more online class offerings.

Student services. Interviewee comments in this section were very minimal, yet highlight a smattering of important issues for students learning from a distance. One of the most challenging problems discussed in regard to student services was the very obvious fact that students are not physically present on campus. This makes auxiliary student services more difficult and can give the student an unrealistic positive or negative view of how the campus operates. In fact, one interviewee revealed that the problems they had on their campus with distance education was how financial aid handled online students. Additionally, one teacher was shocked to find out that over half the students signing up for online classes had no technology skills and several did not even own a computer. This teacher advocated that services to students taking online classes should include student pre-training and assessment of skills needed in order to take online classes.

Evaluation and Assessment

The last meta-theme under the institutionally controlled benchmarks is that of evaluation and assessment. This meta-theme was only minimally discussed by those interviewed with an intensity effect size of 1.4% (see Table 25). Interviewee comments on this theme by-and-large resemble birdshot.

To begin, one mid-level administrator discussed an in-depth, macro-level assessment on the readiness for distance education in that institution. His description of that report is specific and shows the comprehensiveness to which the institution evaluated itself.

The report includes an introduction, background definitions, needs assessment of both school and departmental. We did a faculty-wide questionnaire, talked about computer access, instructional technology use, faculty views of teaching online

and then we identified the impediments and preferences for the types of support for faculty. Then we gave a list of recommendations for what the university should do to plan for the use of technology on our campus.

Continued evaluation of online learning and evaluation as it related to online student testing within a course were also mentioned. One teacher indicated that she and others in her department were just beginning to sort out how to do web-based testing.

Another interviewee hinted at a possible assessment of best practices in their institution when she shared that there was some talk about doing research on the latest ideas of instructional technology and learning theory as it related to distance education.

Finally, one mid-level administrator shared how Internet-based distance education had influenced and enhanced his assessment of face-to-face classes being taught by faculty in his department. He described using multiple methods of assessment including peer review, direct observation, and portfolios.

Faculty-Controlled Benchmarks

The faculty-controlled benchmarks are defined in this study by those benchmarks that are typically controlled by the teacher (Sparrow, 2002). The faculty-controlled benchmarks include: course development, teaching and learning, and course structure. In this section, the meta-themes of faculty-controlled benchmark will be discussed as they relate to the themes from which they were constructed. Figure 6 is a representation of the thematic structure of the faculty-controlled benchmarks.

Course Development

The meta-theme of course development with an endorsement rate of 88.9% (see Table 25) and an effect size of 6.1% (see Figure 6) was developed from the two sub-

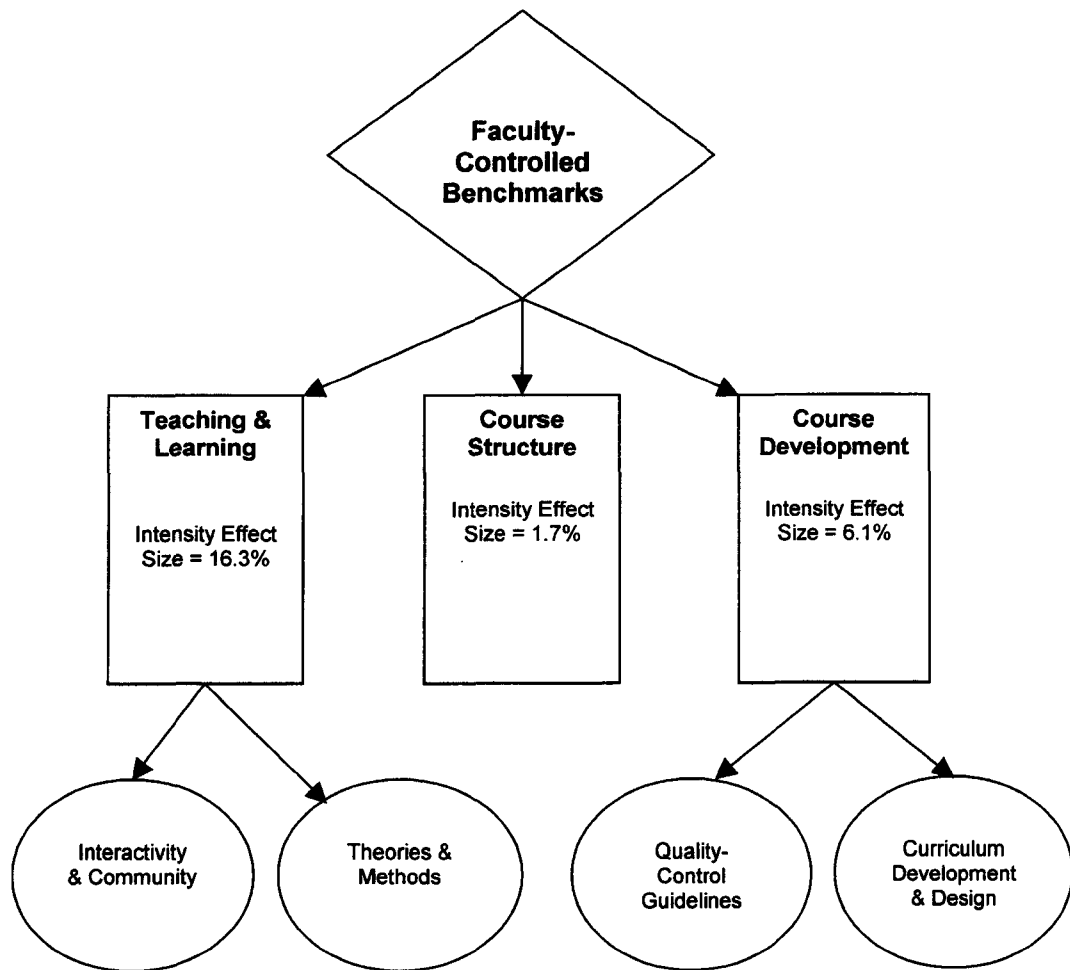


Figure 6. Thematic structure pertaining to faculty-controlled benchmarks.

themes of curriculum development and design and quality-control guidelines. The sub-theme of curriculum development and design was endorsed by 77.8% (see Table 29) of the participants while the sub-theme of quality-control guidelines was endorsed by 44.4% (see Table 29).

Table 29

*Participant Sub-Theme Endorsement:
Course Development*

Course Development Sub-Themes	Percentage
Curriculum Development & Design	77.8
Quality Control Guidelines	44.4

Curriculum development and design. Opinions on curriculum development and design might be best characterized as having confidence that students are able to learn online, with curriculum development seen as a major element in facilitating the distance learning process. One teacher stated that in distance education, the process by which you develop the course becomes the biggest factor in what gets communicated to the students. He felt that when the student is sitting next to you in the room, the course design plays less of a role than it does in a distance course.

The comments of the participants also emphasized that learning online needed contrasting course designs for face-to-face versus distance education courses in order to achieve learning goals. Interviewees stated adamantly that there is no question that students learn online. One teacher spoke with mild irritation about the view of some educators that online course design was as simple as moving your existing face-to-face course online. He felt that all face-to-face courses need to be re-designed to fit the needs

of the online format and that is not always as easy as it appears. Another participant described her own personal experience that tends to exemplify this idea: “I have facilitated statistics, and it was very math-based statistics and trying to explain how to do the math in a chat session is like ughhhh!”

Interviewees also discussed the potential of good course design for meeting student needs and expectations for stimulating courses that adapt to their learning interest and time demands. One teacher acknowledged that there was a real need to match course content with the appropriate design. For example, a web-enhanced basketball class would be superior to trying to teach that course content totally online.

Suggestions from interviewees for online course design included identifying common principles of design and implementation, tying learning theory to distance education, and looking at design as a holistic undertaking. One teacher said that the idea of spiritual course development, the whole being, mind, body and spirit, becomes even more crucial when designing a course for online education.

Quality-control guidelines. Several interviewees highlighted the need for institutions to have quality-control guidelines that would assure continued quality of online distance courses. One mid-level administrator/teacher felt that the goal of guidelines should be standards that would make distance courses as good or better than any face-to-face courses that are offered. He further described the guidelines as standards for developing distance courses, approving instructors and courses, and developing policies. These quality controls were described as important to distance education because, as another interviewee stated, there is an enormous difference between online

education and online education done well. One mid-level administrator shared that he actively advocated and insisted on quality in online education at his institution.

Despite their recommendations to have quality-control guidelines in place, one teacher pointed out some difficulties that have already been encountered when the ADEC (Adventist Distance Education Consortium) tried to initiate guidelines that would apply to all Adventist institutions. The biggest issue cited by this interviewee was ADEC's lack of perceived authority by all of the institutions to be the body that assured quality in distance education.

Teaching and Learning

The meta-theme of teaching and learning with an endorsement rate of 77.8% (see Table 25) and an effect size of 16.3% (see Figure 6) was developed from the two sub-themes of teaching theories and methods, and interactivity and community building. The sub-theme of teaching theories and methods was endorsed by 77.8% (see Table 30) of the participants while the sub-theme of interactivity and community building was endorsed by 56.6% (see Table 30).

Table 30

*Participant Sub-Theme Endorsement:
Teaching and Learning*

Teaching & Learning Sub-Themes	Percentage
Theories & Methods	77.8
Interactivity & Community	55.6

Teaching theories and methods. Interviewee comments about teaching theories and methods did not focus on the use of any specific pedagogy when teaching online. When one teacher was asked specifically whether distance education was developing its own pedagogy, the response was, “I think it’s morphing a pedagogy.” However, several interviewees did indicate that they had to develop a different pedagogy for online teaching than the one used in the classroom. One teacher admitted that he had changed his view of himself as teacher since teaching online. At times, he said, he felt more like a learning assistant than a teacher and confessed it was a little hard on the ego.

Although constructivism was not specifically named as the developing pedagogy for distance education, there is evidence in interviewee comments of a shift to a constructivist point of view. Demonstration of a constructivist perspective was evident in comments like, “It’s all about the students and where they are” or “Students work from the level where they are.” One mid-level administrator/teacher shared an excellent example of the notion that knowledge is not transmitted but constructed. She indicated, “If seat time equaled knowledge we would have a brilliant America. It doesn’t work that way and I need to figure out how to motivate students and I can do that just as well online.”

The focus on learning over teaching was voiced by several interviewees with some advocating that education needed to change its focus from teaching to learning. One interviewee claimed to have found a certain freedom in online teaching because distance is no longer a factor in learning.

An aspect of this changed focus from teaching to learning was demonstrated in views and comments on the role of the student. One teacher advocated that students

begin to assume responsibility for their learning rather than blame the teacher for lack of learning. She felt that Internet-based courses required self-direction from students, and that gives students more self-confidence rather than less. She also believed that her role as teacher online was to engage students in learning but if the students do not want to learn, they still have that choice.

Interviewees also shared teaching methods that seem to reflect student-centeredness and an appreciation for non-traditional students. One teacher commented that one of her pet peeves with education was that it does not understand the adult learner. She related an example of sitting on a board of education one day talking about sending teachers away to obtain teacher certificates at a college far away from their homes. These people were wives, husbands, and people with families, yet the only way they could get their certifications or advanced degrees was to go to a traditional college. You can imagine that this particular teacher did not remain silent in this meeting. Her first question was why the board was not demanding that this type of program be online.

Student-centered attitudes by teachers seem to be constructed, in part, from their own past experiences with online education. One teacher indicated that he did not realize the networking and level of interactions students accomplish until he taught online.

The description of the teaching methods being used by the participants further demonstrates student-centeredness and constructivism. One educator acknowledged that she was giving at least three or four options for every assignment, and students were loving the choices and admitting that the choices were forcing them to take control of their education. Case studies are another example of giving students a context to

construct knowledge. One teacher confessed that she had been thinking about adding case studies to future online courses she was teaching.

The most common teaching methods discussed by the research participants involved the need to create stimulating learning environments through the use of multi-media and mixing teaching methods and materials in order to engage students with different learning styles. One teacher firmly believed that the more senses you engage in distance education the better you will be able to communicate the content to the learner. Another interviewee stated that she sometimes set up an actual class time, using streaming video, so she could talk to students and see them face-to-face. Other methods used included a combination of the Internet plus interactive television so that students could see the teacher and ask questions directly with answers being in real time.

Several interviewees elaborated on accommodating learning styles by saying they know different students benefit from having the written instruction as well as verbal instruction. One teacher was a big proponent of using multi-media for all learning and gave a vivid example of how ignoring the need for multi-media and multi-sensory methods may result in student dissatisfaction. Her story follows:

We usually do voiceover PowerPoint in teaching online classes. We had a teacher that did nothing. He did just the PowerPoint and the book and outline. You know, the students are screaming. I couldn't figure out why. . . . So, I pull the class up online and I'm thinking, where's the voice? So I'm thinking it must be my computer. I was like, what do you mean there is no voiceover. For this particular class I would have voiceovers as well as videos because this particular subject is a visual craft. We are currently re-doing the class and we'll have all those pieces. but there's such a learning curve for the faculty.

Another example of teacher sensitivity to learning styles is demonstrated by one interviewee's commitment to type things for read/write learner, record things for audio learners, and has a variety of multi-media for visual learners. This teacher even

advocated mixing face-to-face and online teaching methods. She described her program's practices as definitely having personal contact at the beginning of the program. Students come for orientation before the fall quarter starts to meet teachers, tour the campus, learn the online software, and even begin with instruction.

The challenges of teaching online were expanded upon by one teacher/administrator. She expressed concern that modeling professionalism for online students has been difficult since students do not see the teacher face to face every day. She further revealed that her school was still coming to terms with what can be done to help students solve this problem.

Interactivity and community building. In reviewing the data from the qualitative interviews, the interviewees thought interactivity and communication building between student and teacher and also between students were very important. Given that the interviewees expressed value in interactivity and community building, some of them also acknowledged the challenges of communicating in a virtual environment.

One interviewee used a metaphor of water through a hose to express the differences of communicating verbally versus virtually. He stated:

If we were to use a fire hose as a method of distributing water and if water was the communications . . . I find face-to-face to be a fire hose, a really big fire hose. Now I can take and run a fire hose for fifteen minutes and totally saturate my backyard. If I took my regular half-inch garden hose, which would be more like a telephone conversation. My hands are up in the air as I speak, my eyebrows are moving up and down . . . you are missing that. Let's take some surgical tubing (online communication), and I hook up water pressure to that and now I go water my backyard. Now, I'm not sure the time elements work to the exact same degree that moving from face-to-face, a telephone mediated conversation to an online discussion board or chat, but in some sense that metaphor helps me to communicate my understanding of how face-to-face can communicate things very quickly and voice does a good job, voice inflection, is still a lot of meaning and is still very engaging.

Another teacher expressed understanding when her students talked about the disconnect they feel in not seeing the people with whom they are interacting. However, most interviewee comments described a high level of community building and interactivity happening in their classes and reported spending a lot of time assisting students with this process. One teacher encouraged students to make friendships with other students by meeting outside of class. He also provided opportunities for students to share online about how their lives are going--the highs and lows, dieting, and spirituality--all those topics that help to build community. Allowing communication within the class to be more than just about subject material motivated students to get involved in the class at a higher level. This teacher suggested that he felt that building community in a virtual classroom was as difficult as trying to make it happen with a large face-to-face course.

As a counterpoint, one teacher's perspective provided a view of the advantages of interacting online: "In an online course there can be no wallflowers. You must hear from everybody. You never get that in a face-to-face class." This caveat of communicating in a face-to-face course is highlighted even further in this teacher's reminder that in face-to-face courses there are always a few people who dominate the discussion and the rest sit and listen and never contribute anything.

A teacher shared his first experience of taking an online class, stating how impressed he was right from the beginning on the level of interactivity between students, instructors, and facilitators. Part of that interactivity he felt was built into the course, as every student was required to post a brief autobiographical sketch and a photo to the discussion board and then provide feedback to a minimum of two classmates' postings. Additionally this teacher felt that courses with synchronous chats or even voice chats, or

employed other technology where you could see a face while you talked, would only enhance online courses in building interactivity and community.

All interviewees seemed very committed to the development of community in their classes and shared creatively about ways to enhance the bonds with their students. Possibly that commitment comes from seasoned teachers who have learned earlier the importance of developing personal contact with students so that the bond between instructor and student facilitates learning regardless of environment.

Course Structure

The meta-theme of course structure with an endorsement rate of 22.2% (see Table 25) and an effect size of 1.7% (see Figure 6) is an example of a theme that was identified *a priori* in the literature (Institute for Higher Education Policy, 2000) but was discussed very little by the participants. The primary issue being discussed is having timelines for assignment due dates and course completion. One teacher discussed this issue at length, stating that because the institution had started distance classes without providing guidelines or timelines for course completion, students would sign up for a class and basically think of it as an open-ended independent study. He described the situation as a huge frustration to teachers due to high incompleteness or students taking as long as 2 years to complete a course.

Only one other interviewee mentioned the issue of course structure by describing that her program had very structured guidelines about when assignments are due. These guidelines are built right into the course, and she felt that she had a good sense early on in the course about which students were going to have trouble meeting deadlines. This

teacher felt that course timelines in terms of best practices are the best way to prevent poor completion rates.

Prevailing Attitudes of Distance Education

In addition to the discussion on benchmark themes, the three additional themes emerged of prevailing attitudes, collaboration, and qualities of an expert. The first of these additional themes relates to the prevailing attitudes interviewees continue to encounter about distance education. One of the interviewees actually used the term “brick and mortar mentality” to describe the prevailing attitude in higher education that face-to-face instruction is the only way for learning to take place. Those interviewed seemed well versed in the many arguments posited for why online distance education cannot work or is somehow inferior. With the emergence of the theme of brick and mortar mentality, the opposite theme also surfaced, a theme my colleague and I call, brick and click mentality--a mind-set that promotes the use of technology in higher education.

Brick and Mortar Mentality

The meta-theme of prevailing attitudes of distance education had an endorsement rate of 100% (see Table 25) and an effect size of 9.4% (see Table 24) and was developed from the two sub-themes of brick and mortar mentality and brick and click mentality. The sub-theme of brick and mortar mentality was endorsed by 88.9% (see Table 31) of the participants, while the sub-theme of brick and click mentality was endorsed by 66.7% (see Table 31).

Table 31

*Participant Sub-Theme Endorsement:
Prevailing Attitudes*

Prevailing Attitudes Sub-Themes	Percentage
Brick & Mortar Mentality	88.9
Brick & Click Mentality	66.7

Most of the interviewees used adjectives such as struggle, fought, challenge, and resistance when discussing the brick and mortar mentality, giving one the sense that they were engaged in battle to defend distance education on their campuses. Conversely, it is interesting to note that two of the experts made statements that may demonstrate their own personal struggles with this teaching paradigm change. One interviewee stated that he was opposed to online classes just for the convenience of schedule flexibility for students who already resided on campus. He felt that online education was really for those who were at a distance from the main institution, suggesting that online education should be the exception not the rule. This teacher also indicated he had a definite preference for teaching in a face-to-face environment rather than online. Another teacher echoed these same sentiments by saying he just did not think there was any substitute for real live contact between teacher and student in the learning environment.

Many interviewee comments displayed examples of arguments that they have encountered from administrators and teachers dismissing Internet-based distance education. An idea interviewees reported hearing a lot on their campus is that Internet-based distance education cannot be done. One mid-level administrator's succinct assessment of the struggle institutions face of a 'brick and mortar' mentality that thinks there is only one way to learn actually coined the theme for this section. Other

participants have experienced this same mentality and report that educators continue to wrestle with the idea that if you cannot look into the eyes of your students there is not good learning happening. One administrator/teacher demonstrated this skirmish vividly in an anecdote she related while trying to convince a fellow teacher that online education was credible and produced positive outcomes.

I fought with her over and over and over and she said, 'It can't be done, it will not be the same learning, students won't engage, they won't do this, they won't do that, they won't do whatever.' And I was like, Don't tell me it can't be done. This interviewee also discussed other common misconceptions about Internet-based distance education such as it is easier, cheaper, and less time-consuming for student and teacher. All ideas that she feels are dead wrong.

Another interviewee observed that the brick and mortar mentality is not only confined to professors. His experience has been that students have a hard time accepting that they are not going to sit in a classroom and learn the same way they have learned for decades. The attitude from students is, Do you mean I am going to pay all this money and there is no teacher getting up in front and teaching me something? Students can therefore be included as assuming a brick and mortar mentality that does not allow them to conceive that they can also learn in different ways.

Community building or social interaction seems to be another argument many hear as a barrier to online teaching and learning. One teacher shared a conversation with a colleague who kept stating that the building of community and especially a religious community could not be done online. Another administrator/teacher stated that he thinks there are some educators who feel that there is not a good way to make online education a social thing. His experience, he says, tells him they are wrong.

Many statements also conveyed a sense that higher education holds fast to an old and inflexible view of education. One administrator/teacher shared that she thought

education had not changed since Socrates was educated and, as a result, education is in a crisis because we cannot do education entirely that way anymore. Another interviewee was quick to note that there are curmudgeons out there who will challenge distance education and have a hard time seeing that online teaching is just a different way of learning. One administrator/teacher was particularly ardent about the inflexibility of some of his colleagues:

I think a lot of colleges are going to lose the opportunity because they do have old and stodgy people who can't think outside the box and in fact, not only do they not think outside the box, they find every way to say that online education is a cheap means of grabbing money and we all should be bigger and better than that. It is really just idiocy when you see Harvard, Yale and MIT and many other schools providing online courses and programs.

Additionally this same interviewee expressed that many will spend a lot of time pontificating on how they know online education will not work but do not have a clue that it is already happening right under their noses.

A teacher who responded to the quantitative survey included a very poignant and thoughtful commentary on his own conflicting, yet merging viewpoints of online education.

While I think that online learning adds some dimensions that are of greater educational benefit than the regular classroom (involvement of all students in presenting their ideas publicly), I also think that a great deal is lost. The influence of a Christian campus and Christian teachers can hardly be replicated on the web. I teach one class online that I also teach in the regular fashion. Students who have begun online, and not completed the course, and who have then taken the course from me in a regular classroom setting, have ALL (no exaggeration) said to me that this course should not be taught online. So, you can see I am a rather reluctant participant in the advance of educational technology. As a member of the old "graying" school, I accept the future but am saddened more than delighted by the prospects of online education. Collaboration is the name of the game, and I believe that much of the game is going to be played on the Internet. We cannot run from the future, not even the old "grays."

Teachers espousing a brick and mortar mentality were described tongue in cheek by one interviewee as a lot of guys who have lecture notes built up that they do not want to throw away. Ironically, this administrator/teacher also observed the same mentality among online teachers who were content to create a sort of correspondence course on the web rather than use the full potential of the Internet and other technology.

When asked about future issues facing Internet-based distance education, several participants highlighted issues of the brick and mortar mentality such as overcoming the stereotypical teacher, school, and student. One interviewee claims the biggest issue is higher education's resistance to change. Two other interviewees observed that potential loss of power for teachers and institutional politics would be the real challenges in the changing system. Finally, one mid-level administrator felt that fear was the real obstacle because nobody is quite sure where all of this is going to end up.

Given how often the participants used battle adjectives such as struggle, fought, challenge, and resistance, one interviewee's statement may provide an insight into how it feels to champion online distance education in an atmosphere of a brick and mortar fortress mentality: "The truth of the matter is that higher education strangles people with new ideas."

Brick and Click Mentality

When interviewees were discussing education in an era of Internet technology, their comments may also be characterized as a brick and click mentality or a mind-set that promotes the use of technology in higher education. Interviewees see distance education enhancing but not replacing traditional education and recognize that the role of

the teacher will change. They have confidence that Internet-based distance education is not a fad, and they see numerous opportunities for expansion in the future.

It is imperative to note, in light of earlier discussed findings, that interviewees do not suggest that Internet-based distance education will replace traditional education. Rather they see distance education as enhancing or broadening the scope of traditional education. One thing almost every interviewee agreed on was that Internet-based education is here to stay. It may not be a panacea, as one teacher described, but it is not going away. One interviewee said that even with all the research to support the effectiveness of Internet-based distance education, he felt that online education was never going to replace traditional education.

One administrator/teacher talked about the changing role of the online teacher in terms of going from a “sage on the stage to a guide on the side.” She indicated that many people like the sage on the stage role of teaching as it gives a warm, important feeling. In fact, she thinks it is probably one of the reasons that many go into teaching --- to give back knowledge and be important in the disciplines. Conversely, the guide on the side role is not as glamorous, but one that this same interviewee finds rewarding and fulfilling. This kind of re-conceptualization of the role of the teacher we believe is a part of the brick and click mentality.

As a part of the brick and click mentality, the interviewees exhibited a future orientation and appeared to be open to and aware of opportunities to apply new educational technology. One administrator/teacher expressed that online distance education is in its infancy, and 25 years from now we will look back amazed as how far we have come. He used a creative analogy to further illustrate his concept.

A good analogy to online education is to think about when the first automobile was first created. I think we are in those very initial stages with online education. Some of the forms will stay, but in a few years down the road we are going to look back with some humor about what we are doing now.

The participants discussed many opportunities available through the use of Internet technologies, but often talked about them in terms of unmet potential. One interviewee said, "If we can find these benefits of distance education, we are not being smart if we ignore them. We need to continue to integrate them." Another teacher states that when doors open up we will need to walk into those new rooms and figure out new ways of integrating the past with the future. One interviewee called for a vision to discover those opportunities that are available but not capitalized upon. He prophesied that institutions and/or people who can think outside the box and use assets available in their environments are going to be the ones who take the market in higher education.

In the additional comment section of the quantitative survey, an academic dean shared her own conflicting, yet open ideas about the role of Internet-based education to higher education.

How crucial Internet-based education is to the future of the institution is a tough one. I think our institution would be successful without it. However, distance education is important to a certain niche at our institution, in my opinion, and it also enhances face-to-face classes.

Working in teams may also be a characteristic of a brick and click mentality.

Although the professor in traditional education can often function successfully in isolation, that same level of success may not be possible for a distant teacher. One administrator/teacher described that he and his colleagues work together; all five of them sit around, talk about how to make an online program happen, dream about the next big thing, decide on how they are going to do it and who will do what, and then just go out

and do it. He chuckled when he related that after each big project together they get together and say, “What’s our next big thing that will make us explode?” and start the process all over again.

Collaboration

The meta-theme of collaboration was endorsed by those interviewed with an intensity effect size of 9.1% (see Table 24). Participant comments in the meta-theme of collaboration represent two sub-themes, barriers and opportunities. Both sub-themes were endorsed by 66.7% of participants (see Table 32).

Table 32

*Participant Sub-Theme Endorsement:
Systems Collaboration*

Systems Collaboration Sub-Themes	Percentage
Barriers	66.7
Opportunities	66.7

Barriers

Over half of the interviewees had something to say about barriers to distance education collaboration between Adventist colleges and universities. One teacher captured well the unease some have with the discussion of a possible paradigm change by posing the question, “Can collaboration even be engineered?” Several participants felt that Internet-based distance education was being hindered by institutional boundaries and territorialism and it was how long you have been there, who you know, and who you are connected to that made the difference in whether collaboration was possible or not. It

was felt by one administrator/teacher that larger institutions would always control any collaborative efforts between Adventist schools, and those with more power would only dictate policies and procedures to slow down distance education, not enhance it.

One mid-level administrator said that “if it is going to cost us something to let another Adventist school get some of our tuition dollars, than you bet administrators will want to take a hard look at that.” This interviewee reasoned that financially Adventist institutions are independent from each other and this fact alone will create the barriers in trying to work together. He further postulated that the ‘sine qua non’ was we are still trying to figure out if collaboration is financially viable for each institution.

Collaboration itself was seen by one respondent as a barrier to growth in his own distance education program.

[Distance education] is a competitive market. We are all out for the same dollar and why should some schools take the initiative and foresight, working extremely hard to make it happen, just to be slowed down by some other institution that wants what they have?

It may also be that collaboration is not a practical option because, as one teacher asked, “When you have two colleges working together, who gives the degree?”

Finally, a self-described “old gray hair” teacher suggested that the greatest barrier maybe the system’s own inability to move away from competition with each other and take advantage of the timely opportunity for collaboration. This respondent noted that public universities, with no ties to each other, are already collaborating with each other in order to maximize resources. He cautioned that if Adventist institutions do not figure out a way to maximize limited resources, it might result in the closure of some of the smaller and weaker campuses in the system.

Opportunities

Two interviewees enthusiastically discussed the strategic opportunities for collaboration that distance education provides the Adventist system worldwide. One teacher declared, “If we believe that we have the task in higher education of supporting a worldwide education system, online education and shared resources will be central to a strategy of helping our institutions in the developing world.”

Another administrator/teacher reflected he would rather approach distance education from the church organization stating that if the church would actively get involved there would be ways of teaching around the world without having to go there anymore.

Another teacher saw collaboration as a way to give students the opportunity to expand options in education because it takes away geographical barriers. A vision of another teacher was that students could look on one website that showed course offerings from all Adventist schools, take the class, and have it transferred to the college they were attending.

Finally, a specific collaboration opportunity was discussed by a teacher as it related to the Adventist Distance Education Consortium (ADEC): “I think if ADEC is able to accomplish its mission to incorporate the classes taught at Adventist colleges within a block tuition for students, this would be exciting.”

Qualities of the Expert

The meta-theme called qualities of the expert was endorsed by all nine interviewees and had an intensity effect size of 19.9% (see Table 24). These nine

interviewees were identified when survey participants were asked to name an Internet-based distant education “expert” on their campus. As a result, these nine individuals have been our “experts” for the qualitative portion of this mixed-methods study.

Qualities of the expert emerged in response to the direct question asked of interviewees, “Why do you think you are considered an expert in Internet-based distance education on your campus?” Interestingly, participant responses developed a unique and detailed composite of who they were as experts, and this synthesis may give us a window into the Internet-based distance education expert on other higher education campuses across America.

First, several of our experts were people who did not see themselves as experts. When these humble people were told that they were listed as an expert on their campus, they responded with, “That is so interesting to me. I never saw myself as that” or, “I don’t know why I am perceived that way because I sure don’t perceive myself as an expert.” Two participants responded with humor by stating that experts were really nothing more than water under pressure or just someone who seems to know more than the person he is talking to. True to their academic roots, most felt that ultimately the answer should depend upon how expert was being defined, but when we refused to qualify the term, they all eventually answered the question in ways that uniquely described what they were doing in their institutions.

We found that eight of the nine experts interviewed were working in professional programs within their institution. One administrator/teacher may have provided a partial explanation to this phenomenon by saying that professional programs must be computer literate because the practice discipline expects that of graduates.

One person had no idea why they were being called an expert on campus except for the fact that they were willing to venture forth and assist in online program development. Another individual had similar thoughts and saw their expert status resulting from the fact that they had been involved with distance education from the beginning on their campus. The majority of these pioneers in online education gave similar self-descriptions of just being willing to get out there to explore and try different things or not being afraid to try something new. They used words like innovators, risk-takers, and early adopters and declared unabashedly that they were technologically competent, and not afraid of looking silly. Several interviewees described the passion they have for online teaching and course design. They enjoyed, loved, or were excited by it and were interested in assuring that quality teaching is occurring in online classes. In addition, many of our experts were enthusiastic about the potential of technology and looked actively for creative ways to use new technology in any teaching environment.

Three of the nine participants were deliberate with their risk-taking by seeking graduate degrees that focused on education and technology. One participant recognized that just having that degree seems to make a difference as to why someone would consider him an expert. Others felt that because they had more online teaching or technology experience than others on their campus, people saw them as the to-go-to person for education technology and distance learning.

Being further down the road, already having taught four or five courses online or having the experience of putting whole programs online gave many of these experts the additional unsolicited role of mentor. They described themselves as the “go to” guys and the colleagues that people just drop in on out of the blue to ask technological questions.

Many spend a lot of time teaching educators on their campuses the various forms of technology in education and how to teach online. These experts just make themselves available to help others. One interviewee revealed that helping others with all their questions could get difficult at times, especially when people just drop by without regard for schedules.

Who are these experts? They are risk-taking, technologically competent educators who continue to find new ways to demonstrate individual passions in an exciting new paradigm of education in hope that others will catch a vision of the future.

Summary

This chapter provided the results of this mixed-methods study. The quantitative results of the survey were presented first, followed by the themes that emerged from the qualitative interviews.

CHAPTER FIVE

SUMMARY, FINDINGS, DISCUSSION, AND RECOMMENDATIONS

This chapter provides a brief summary of the study, a review of the findings and discussion, followed by recommendations for practice and research from a faculty perspective. Administrative and institutional issues are discussed in greater detail in the study conducted by Pamela Cress.

Study Summary

An examination of Internet-based distance education is important in order to maintain the delivery of quality higher education, and to encourage the systemic adoption of institutional and instructional policies and practices that promote excellence in Internet-based distance education. The quality of online distance education will increasingly become the standard by which students choose a program, since their educational options have multiplied with the dramatic growth in distance education course offerings. The purpose of this mixed-methods study was to determine to what extent the Adventist colleges and universities in North America met the IHEP benchmarks for quality Internet-based distance education, and to better understand teachers' experiences with Internet-based distance education.

This study used a sequential exploratory mixed-methods design in which teachers and administrators in nine Adventist colleges and universities across the United States

were first surveyed using an electronic version of the IHEP benchmarks, followed by a qualitative phase of the study that involved telephone interviews with a specific identified expert in Internet-based distance education at each of the nine campuses.

Findings and Discussion

This section will explore the findings of this study based upon the major research questions. For the most part, the perceptions about the benchmarks were not significantly different between administrators and teachers; however, the study did uncover weaknesses in meeting the institutional-controlled benchmarks that support a high-quality distance education program. Internet-based distance education was found to be important, and future plans were to increase offerings at the schools studied. Findings that were statistically significant were gender perceptions and the combined effect of experience and position. It was also found that mid-level administrators with online teaching experience identified more strongly with leadership roles than teachers or administrators. Unexpected findings included gender differences in benchmark perceptions and the emergence of themes not covered in the IHEP benchmarks.

The Benchmarks

This section discusses the findings to the research questions involving the finding of the study which pertained to the extent to which Adventist colleges and universities demonstrate quality Internet-based distance education as measured by the IHEP benchmarks (Institute for Higher Education Policy, 2000). The institutional-controlled benchmarks will be reviewed, and the data from the quantitative and qualitative analyses

will be compared. The same process will be followed for the faculty-controlled benchmarks.

In the quantitative phase of the study, the survey questions asked the participants to rank the degree to which the benchmarks characterized their Internet-based distance education practices on a 5-point scale, with 1 being “strongly disagree” and 5 being “strongly agree.” The participants were also given the option of selecting “I don’t know” as a response. A mean above 3 was interpreted as affirmative. The determination of whether a benchmark has been met is made in two ways: the first is the achievement of a mean above 3; the second is whether the majority of the respondents provided an affirmative response of “strongly agree” or “agree.” In order to conclude that the benchmark has been met, it would be expected that both of these criteria would be present. In the qualitative data analysis, the benchmarks were used as an *a priori* thematic categorization in order to facilitate the comparison of the quantitative and qualitative data for the purpose of complementarity: to enhance, illustrate, and clarify the results from the quantitative analysis of the benchmarks with the results of the qualitative analysis (Caracelli & Greene, 1997).

Institutional-Controlled Benchmarks

This section will discuss the data comparison of the institutional-controlled benchmarks: a summary of the quantitative and qualitative findings of institutional support, faculty support, student support, and evaluation and assessment.

Institutional support. The survey results demonstrated affirmative means between 3.95 and 4.16 (see Table 1) for the three institutional support benchmarks. In the

qualitative phase of the study, the institutional support benchmarks had an overall intensity effect size of 20.2% (see Figure 5) which was the highest effect size in the study. The interviewees' discussion focused on two areas: financial challenges, and vision, mission, and strategic planning.

The first institutional support benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) state: "A documented technology plan that includes electronic security measures is in place and operational to ensure both quality standards and the integrity and validity of information." The survey finding revealed that the majority of respondents (67%) gave an affirmative response of "strongly agree" or "agree" (see Table 1) that this benchmark characterized their program. Given the mean of 4.16 and the majority of the respondents providing an affirmative response, the conclusion is that this benchmark was met. Interestingly, in the qualitative phase of the study, the sub-theme of vision, mission, and strategic planning demonstrated an endorsement rate of 100% (see Table 26), while the participants' comments were characterized by the view that there is a lack of institutional vision and strategic planning for distance education. In the qualitative interviews, only two of the participants indicated that their institutions had strategic plans targeting technology and/or distance education. Only one of the participants spoke knowledgeably about their institution's plan. This is a jarring contrast between the quantitative and qualitative findings: The quantitative results indicate that this benchmark is characteristic of overall campus practices yet the qualitative participants who were identified as experts cited the lack of institutional strategic planning and could not readily identify an institutional plan.

This contrast can lead to an examination of a common misconception about distance education that the majority of the discussion centers on technology (i.e., infrastructure, security, hardware, software). In other words, if you have enough computers which are password protected and loaded with the right software, this is indicative that a technology plan is in place. The qualitative data give cause for concern due to the sheer volume of discussion regarding the lack of vision and strategic planning by a group seen as the most knowledgeable. Yet it was discovered that these experts could not fluently discuss their campus vision or strategic plan or even identify if it existed at all. A gap in knowledge in the average faculty member might be expected, but seems peculiar in an expert. If the experts do not know what is going on, then who does? Simply by virtue of who they are, the campus experts citing the lack of vision and planning seem to validate the view that this truly is a void and if a plan did exist, why was the campus not expert a part of the planning process?

The second institutional support benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) state: “The reliability of the technology delivery system is as fail-safe as possible.” The quantitative survey finding revealed a mean of 3.95. The majority of respondents (71%) gave an affirmative response of “strongly agree” or “agree” (see Table 1). These data imply that the second benchmark was also being met. In the qualitative phase of the study, the participants spoke only slightly about information technology. Their comments were primarily focused on the issue of affordability of new technology. Consequently, the corresponding qualitative data on information technology are found within the theme of financial challenges, which demonstrated an endorsement rate of 100% (see Table 26). The participants did not speak

directly to the issue of reliability in the qualitative portion of the study. This might be accounted for because, beyond the specific needs of distance education, higher education has grown increasingly dependent upon a reliable technology delivery system and the market demand for reliability has likely been accounted for by standard operating procedures. As an example, reflect back on the last time your campus email went down, or when the academic records database was unavailable due to technical problems. This can cause panic on most any campus, whether it offers distance education or not.

The last institutional support benchmark outlined by IHEP (Institute for Higher Education Policy, 2000) states: "A centralized system provides support for building and maintaining the distance education infrastructure." The quantitative survey results showed a mean of 4.14. The majority of the respondents (79%) gave affirmative responses to this benchmark. These data support the conclusion that this benchmark was met. As noted above, in the qualitative phase of the study, the participants' concerns regarding information technology were primarily expressed in terms of financial challenges due to the high cost of technology.

Based upon the findings on the institutional support benchmarks, it would appear that it is possible to have a centralized system of support for distance education without having a vision or strategic plan. That seems incredible: Either these centralized systems do not actually exist; are mistaken for technical support; or if they do exist are token departments that are unsupported and underappreciated. The IHEP benchmarks themselves require reexamination to better define strategic planning and to give greater clarity regarding plans and systems that are focused only on technology versus those that are more conceptual (i.e., pedagogical, vision statements, strategic plans).

It is important to note that within the sub-theme of financial challenges, the qualitative participants developed ideas beyond the scope addressed by the IHEP institutional support benchmarking. Specifically, the issue of faculty loading and remuneration was highlighted as a vital concern of time and money that affects professional development, quality of teaching, and course development. This too is an area that should be examined for future inclusion in the benchmarks.

The issue of faculty loading and remuneration is an enormous concern in most discussions of distance education. This issue was discussed extensively in the qualitative phase of this study, and is highlighted throughout the literature as a barrier to faculty development (Bonk & Dennen, 2003; Butler & Sellbom, 2002; Dillon & Walsh, 1992; Olcott & Wright, 1995; Wilson, 2003; Wolcott, 2003). The traditional teacher-centered paradigm with the professor as expert cannot justify a reason why faculty should receive additional loading for teaching online, or professional development in the area of online pedagogy. It implies that the all-knowing faculty have some major limitations if they need to be trained to teach. It appears that the issue of loading and remuneration for online faculty may have unearthed a problem that existed all along, the misconception that professors do not need to be acquainted with the craft of teaching. The lack of pedagogical training has been safely obscured within the teacher-centered model (Diaz, 2000). Most content experts can spew information at a captive audience of students in a classroom, but that just does not work in the virtual classroom (Palloff & Pratt, 1999; Smaldino, 1999). Is it possible it does not work in the traditional classroom either? Faculty members interested in teaching online are looking for the time to develop competence in the use of educational technology and distance education. The amount of

time necessary can only be made available by the institution or through the motivation of determined teachers. The new focus on pedagogy caused by Internet-based distance education is beneficial for higher education in general, and should be nurtured by administrations in order to invigorate a campus culture that focuses on learning instead of teaching.

Additionally, there is the misconception that distance education is a big moneymaker, and if faculty members are being loaded for course development and compensated additionally for teaching online then profit margin is lost. However, there is another price to pay when online faculty are not compensated in time and money: apathy, disinterest, and disloyalty (Bonk & Dennen, 2003; Wolcott, 2003). A faculty member might think, “If my own school will not compensate me for teaching online, there’s always another one that will.” What keeps a faculty member in Washington with online teaching skills from teaching a class for the University of Phoenix? Nothing.

Faculty support. The survey results demonstrated affirmative mean scores between 3.10 and 4.18 (see Table 6) for the four faculty support benchmarks. In the qualitative phase of the study, the faculty support benchmarks had an overall intensity effect size of 10.8% (see Figure 5) and the interview participants’ discussion focused on the two areas of course management issues and faculty training.

The first faculty benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) states: “Technical assistance in course development is available to faculty, who are encouraged to use it.” The quantitative survey results revealed a mean of 4.18 and that the majority of respondents (75%) gave an affirmative response of “strongly agree” or “agree” (see Table 6), inferring that this benchmark was met. In the qualitative

phase of the study, the theme of course management issues demonstrated an endorsement rate of 66.7% (see Table 27). The interviewees who talked about technical assistance within this theme indicated that often their best source of help when teaching online came from the technical support staff. However, in the theme of course management issues, the discussion primarily involved the immense difficulties that teachers faced in managing an online class, and the support that is necessary to keep their classes afloat. The issue of the increased time commitment for the online teacher was the most acknowledged aspect of this theme. It may be concluded that the technical support service staff have risen to the challenge of assisting faculty, but this does not account for the increase in time commitment presented by teaching online. Administrative policies regarding class size limits and faculty loading are needed to address the time demand issues for the faculty (Higher Education Program & Policy Council, 2000).

The second faculty support benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) states: "Faculty members are assisted in the transition from classroom teaching to online instruction and are assessed during the process." The quantitative survey results revealed a mean of 3.41, and the majority of respondents (53%) gave an affirmative response of "strongly agree" or "agree" (see Table 6) that this benchmark characterized their program. However, a significant portion (48%) of the sample did not provide an affirmative response (see Table 6). Four percent did not know, 16% gave a neutral response, 16% disagreed, and 11% strongly disagreed. This implies only a very modest affirmation that this benchmark was met. Clearly, there are numerous respondents who feel that faculty assistance in the transition from classroom to online teaching is not available to them on their campuses. In the qualitative phase of the study,

the theme of faculty training demonstrated an endorsement rate of 77.8% (see Table 27). The interviewees concurred that one of the most urgent needs is to assist faculty in making the transition to teaching online. Some of the comments in the qualitative interviews suggest that some faculty do not seek training and assistance because they are intimidated by the use of technology, and are afraid of looking dumb. The interviewees voiced their concerns about faculty training around the two issues of technology use and the development of online pedagogy. The lack of time was again listed as a constraining issue in the professional development of faculty.

The research findings concur with the literature that the challenge of faculty support is to help them teach with technology rather than merely providing technical support (Lee, 2002; Palloff & Pratt, 2001; Wolcott, 2003). Technical support without pedagogical support does not prepare teachers for the paradigm change needed towards a model that is student-centered based in constructivist theory. Teachers need support in conceptualizing how their face-to-face class can be transformed to an online delivery (Naidu, 2003). For a typical faculty member of the future, technological competence is likely to be viewed as necessary rather than a nicety as expectations change in terms of teaching skills and repertoire (Wolcott, 2003). The literature also supports the use of a framework or model of faculty support. Many of these models utilize constructivist theory and methods in order to train faculty (Chism, 2004; Meyen, 1999; Truman-Davis et al., 2000).

The third faculty support benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) states: "Instructor training and assistance, including peer mentoring, continues through the progression of the online course." The quantitative

survey results revealed a mean of 3.23 and that the majority of respondents (59%) did not give an affirmative response (see Table 6). Sixteen percent did not know, 17% gave a neutral response, 13% disagreed, and 13% strongly disagreed. Although the mean is just above 3, more respondents provided non-affirmative responses that this benchmark was characteristic of their campus's practices. As noted above, the theme of faculty training highlights the need for the allowance of increased time to devote to faculty development. One of the participants discussed how beneficial it was "having another human being to just sort of stand and give ideas." Another discussed how few resources are allocated to faculty training. As a partial solution, one participant described his campus's practice of using students to help train and mentor faculty. The literature has also pointed to the value of mentorship as an element of effective faculty development (Care & Scanlan, 2000; Wilson, 2003). The experts in the qualitative phase of this study exhibit the trait of helpfulness through peer mentorship, and they cited this trait as an explanation for their identification as campus experts. Administrations, however, cannot expect that mentorship will grow spontaneously on their campuses without cultivation.

The last faculty support benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) states: "Faculty members are provided with written resources to deal with issues arising from student use of electronically-accessed data." The quantitative survey results revealed a mean of 3.10, the lowest mean score of all of the benchmarks and that the majority of respondents (60%) did not give an affirmative response (see Table 6). Fourteen percent did not know, 10% gave a neutral response, 23% disagreed, and 13% strongly disagreed. Although the mean is just above 3, a larger percentage of the respondents did not agree that this benchmark is characteristic of their

campus's practices. In the qualitative phase of the study, the participants did not discuss the issue of written resources to deal with student use of electronic data. In fact, library resources in general were not discussed.

Student support. The survey results demonstrated affirmative mean scores between 3.41 and 4.21 (see Table 5) for the four student support benchmarks. In the qualitative phase of the study, the student support benchmarks had an overall intensity effect size of 5% (see Figure 5) and the interviewees' discussion focused on the two areas of student access and student services.

The first student support benchmark outlined by IHEP (Institute for Higher Education Policy, 2000) states: "Students receive information about programs, including admissions requirements, tuition, and fees, books and supplies, technical and proctoring requirements, and student support services." The quantitative survey results revealed a mean of 4.21 and the majority of respondents (75%) gave an affirmative response of "strongly agree" or "agree" (see Table 5) that this benchmark characterized their program. This high mean and large majority of the sample who gave affirmative responses indicates that this benchmark was met. In the qualitative phase of the study the participants did not specifically address the issue of students receiving information; however, in the sub-theme of student services which had an endorsement rate of 44.4% (see Table 28) one participant did express concerns about the manner in which financial aid was working with distance students.

The second IHEP student support benchmark (Institute for Higher Education Policy, 2000) states: "Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government

archives, news services, and other resources.” The quantitative survey result revealed a mean of 3.41 and that the majority of respondents (54%) did not agree (see Table 5) that this benchmark characterized their program. Sixteen percent did not know, 16% gave a neutral response, 17% disagreed, and 5% strongly disagreed. Although the mean is above 3, a higher percentage of the respondents provided neutral or negative responses about whether this benchmark was characteristic of their campus’s practices. In the qualitative phase of the study, in the sub-theme of student services, interviewees did discuss the issue of students needing pre-training before engaging in an online class. They did not, however, restrict their thoughts about training to the realm of researching online sources, but mentioned other areas as well. Electronic research is increasingly becoming the norm for most students, whether residential or distant and schools will need to address the impact that technology is having on library services and literature research.

The third student support benchmark (Institute for Higher Education Policy, 2000) states: “Throughout the duration of the course/program students have access to technical assistance, including detailed instructions regarding electronic use, practice sessions prior to the beginning of the course, and convenient access to technical support staff.” The quantitative survey findings revealed a mean of 3.90 and the majority of respondents (59%) gave an affirmative response of “strongly agree” or “agree” (see Table 5). However, a significant portion (42%) of the sample did not provide an affirmative response. In the qualitative phase of the study, the theme of student access demonstrated an endorsement rate of 88.9% (see Table 28). The issue of access in the qualitative interviews was seen more as a concern about opening greater opportunities to higher education to marginalized students. Access to technical support was not directly

addressed; however, the sub-theme of student services did address the need for student training prior to enrollment.

Inadequate student support not only has a negative impact on the learning experience for the student, it also has another negative effect in that it adds to the time and effort required of the teacher. Students who lack information, skill, or technology will most likely come first to the teacher for solutions. If the student support infrastructure is lacking, the teacher is likely to attempt to assume the added roles involved in student support services (Bonk, 2000). Poor student support may have a direct impact on teacher satisfaction and add to the complaints of time intensity from the teacher.

The last student support benchmark (Institute for Higher Education Policy, 2000) states: “Questions directed to student services personnel are answered accurately and quickly, with a structured system in place to address student complaints.” The quantitative survey results revealed a mean of 3.56, and the majority of respondents (61%) did not give an affirmative responses (see Table 5) that this benchmark characterized their program. A large portion of the sample (34%) responded that they did not know, 10% gave a neutral response, 13% disagreed, and 4% strongly disagreed. Although the mean is above 3, the large number of respondents that did not know or disagreed that student service responses are accurate and quick seems to be an indication of the lack of awareness of the quality of the support staff’s services that are so vital to distant students. The interviewees in the qualitative interviews did not address this issue.

Evaluation and assessment. The survey result demonstrated affirmative mean scores between 3.29 and 3.62 (see Table 7) for the three evaluation and assessment

benchmarks. In the qualitative phase of the study, the evaluation and assessment benchmarks had an overall intensity effect size of 1.4% (see Figure 5) and an endorsement rate of 55.6% by the interviewees (see Table 25).

The first evaluation and assessment benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) states: “The program’s educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards.” The quantitative survey result revealed a mean of 3.60 and that the majority (52%) gave an affirmative response of “agree” or “strongly agree” (see Table 7). A large portion of the sample (48%) did not, however, give affirmative responses. Although the mean is above 3, the large number of respondents that did not know or disagreed that the program’s effectiveness is being assessed seems a mediocre affirmation of this benchmark. None of the interviewees reported that their entire distance education programs were being evaluated using several methods with specific standards; however, one dean mentioned that he was evaluating teaching effectiveness using multiple methods. Due to the wording of this question, there may be multiple reasons why this benchmark was not met, namely, although courses are evaluated, entire programs may not be. Also, multiple methods of assessment might not be utilized or meet specific standards.

The second evaluation and assessment benchmark (Institute for Higher Education Policy, 2000) states: “Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate program effectiveness.” The quantitative survey result revealed a mean of 3.29 and that the majority (62%) did not provide affirmative responses (see Table 7). Twenty-nine percent responded that they did not know, 6% gave

a neutral response, 20% disagreed, and 7% strongly disagreed. Although the mean is above 3, the large number of respondents who did not know or disagreed that data were used to evaluate program effectiveness does not affirm that this benchmark was met. The interviewees discussed evaluation and assessment very little. One interviewee did, however, describe a needs assessment that was done at his institution regarding computer access, instructional technology use, and faculty views of teaching online, which resulted in institutional recommendations. The lack of distance education program evaluation may stem directly from the lack of vision and strategic planning. Inadequacies in program evaluation might be viewed as symptomatic of the lack of institutional investment in their distance education programs. Additionally, accreditation standards are increasingly asking for colleges and universities to demonstrate how evaluation and assessment are being used to guide decision-making and practices.

The last evaluation and assessment benchmark (Institute for Higher Education Policy, 2000) states: “Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.” The quantitative survey results revealed a mean of 3.62 and that the majority (51%) gave an affirmative response of “agree” or “strongly agree” (see Table 7) that this benchmark characterized their program. A large portion of the sample (49%) did not, however, give affirmative responses. Although the mean is above 3, the large number of respondents who did not know or disagreed that the intended learning outcomes are reviewed regularly was a weak affirmation of this benchmark. None of the interviewees in the qualitative phase of the study discussed the practices of reviewing learning outcomes regularly to ensure quality. The explanation for why this benchmark was so weakly endorsed may point to a failing in using assessment

to inform practice and improvements. The use of the term “regularly” may have also garnered a weaker response if campus practices do not include routine assessment and evaluation. It is also worthwhile to point out that the evaluation of individual online courses is often held to a standard higher than the face-to-face counterpart, due to the review and pre-approval processes used on many campuses. The belief that a significant difference really does exist between traditional and online courses may be a source of the more intensive examination of individual online courses (Russell, 2000). The weakness of the survey response to all of the evaluation and assessment benchmarks is a strong indication of deficits in this area as a whole. The importance of evaluation and assessment is evident; however, due to the newness and rapid growth of online distance education and the ever-changing offerings of educational technology, regular and rigorous assessment is needed to ensure quality and to expand the knowledge base (Lockee et al., 2002; Russell, 2000).

Faculty-controlled Benchmarks

This section will review the data comparison of the faculty-controlled benchmarks. Specifically it will address a summary of the quantitative and qualitative results on the benchmarks of course development, course structure, and teaching/learning.

Course development benchmarks. The survey result demonstrated affirmative mean scores between 3.62 and 4.14 (see Table 2) for the three course development benchmarks. In the qualitative phase of the study, the course development benchmarks had an overall intensity effect size of 6.1% (see Figure 6) and the interviewees’

discussion focused on the two areas of quality control guidelines and curriculum development and design.

The first course development benchmark as outlined by IHEP (Institute for Higher Education Policy, 2000) states: “Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes—not the availability of existing technology—determine the technology being used to deliver course content.” The quantitative survey findings revealed a mean of 3.74 and the majority of respondents (64%) gave an affirmative response of “strongly agree” or “agree” (see Table 2) that this benchmark characterized their program. The mean of 3.74 and the majority of the survey sample responded that they “strongly agree” or “agree”. In the qualitative phase of the study, the theme of quality control guidelines demonstrated an endorsement rate of 44.4% (see Table 29). The interviewees who talked about guidelines primarily discussed them in terms of their importance in producing high-quality distance education courses, but they did not state whether their institution actually utilized guidelines to ensure minimum standards. A logical question then is, Why is face-to-face course development not held to the same standard? If the consensus is that attention to standards and learning outcomes is good for distance education, why would not that same attention also be beneficial for traditional education? The autonomy of the instructor is a central question in the issue of course development and the effectiveness of using student-completed course evaluation as the only means of gauging course outcomes. The literature supports the use of teams in online course development, and the role of the teacher is viewed as a content specialist (Care & Scanlan, 2000; Moore &

Kearsely, 2005). The question of how learning outcomes are determined might best be broached to an audience broader than the sub-set of distance education.

The second course development benchmark (Institute for Higher Education Policy, 2000) states: “Instructional materials are reviewed periodically to ensure they meet program standards.” The survey results revealed a mean of 3.62 and 54% of the sample provided an affirmative response; however, 45% did not provide an affirmative response of “agree” or “strongly agree.” Interestingly, none of the participants in the qualitative interviews ever mentioned whether their materials are reviewed periodically (see Table 2). The mean of 3.62 and 54% of the sample affirming the presence of the benchmark was viewed as modest evidence that this benchmark was met. With the overall weakness in meeting the evaluation and assessment benchmarks and the contradictory nature of data on planning, the difficulty with this benchmark may be explained by the lack of program standards. Negligence in the periodic review of the materials might also be a primary issue. It is also important to note that even though technically this benchmark is included in the faculty-controlled benchmarks, these reviews could also be mandated administratively.

The final course development benchmark (Institute for Higher Education Policy, 2000) states: “Courses are designed to require students to engage themselves in analysis, synthesis, and evaluation as part of their course and program requirements.” In the quantitative survey, the respondents seemed confident in this benchmark with a mean of 4.14 and 76% of the respondents (see Table 2) answering that they “strongly agreed” or “agreed.” In the qualitative phase, 77% of the participants (see Table 29) endorsed the theme of curriculum development and design. The sentiment of the interview participants

was that curriculum development is a major element in facilitating the learning process and that this element was more critical in distance education than in face-to-face courses. The confident endorsement of this benchmark signals the recognition of hallmarks of good teaching and learning, whether it is face-to-face or online. This is familiar territory for teachers, and the response data display a common ground with traditional education. Of interest would be the better understanding of the methods that instructors are using in the classroom to facilitate analysis, synthesis, and evaluation, versus online methods. It would also be valuable to understand how teaching online has influenced faculty members' face-to-face teaching methods and philosophy.

Teaching/learning benchmarks. The survey results demonstrated affirmative mean scores between 3.87 and 4.40 (see Table 3) for the teaching/learning benchmarks. In the qualitative phase of the study, the teaching/learning benchmarks had an overall intensity effect size of 16.3% (see Figure 6) which was the second highest effect size in the qualitative phase of the study. The interview participants' discussion focused on the two areas of interactivity and community, and teaching theories and methods.

The first teaching/learning benchmark as described by IHEP (Institute for Higher Education Policy, 2000) states: "Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/or email." The quantitative survey results showed that 87% of the respondents "strongly agreed" or "agreed" that this benchmark characterized their campus practices (see Table 3) and the mean was 4.40 (see Table 3) which was the second highest in the survey. In the qualitative phase of the study, the theme of interactivity and community demonstrated an endorsement rate of 55.6% (see Table 30). The interviewees who

discussed interactivity and community placed a high premium on interactivity between student and teacher, and also the building of community and interactivity between students. Several participants highlighted the difficulties inherent in communicating in a virtual environment, but also reported the advantages of having 100% student participation in online classes. The importance of interactivity is further substantiation that constructivism is foundational to distance education. Dewey (1944, 1959) and Vygotsky (1978) emphasized the social nature of learning, as does the recent distance education literature (Bonk & Dennen, 2003; Huang, 2002; Sammons, 2003; Wilson & Brent, 2000). The qualitative and quantitative findings support that the faculty both recognize the need for interactivity and community-building and employ methods to encourage student interactivity.

The second teaching/learning benchmark described by IHEP (Institute for Higher Education Policy, 2000) states: "Feedback to student assignments and questions is constructive and provided in a timely manner." The survey results revealed a mean of 4.25 and 81% of the sample provided an affirmative response (see Table 3). Despite the strong affirmation of this benchmark, the interviewees did not specifically discuss the issue of timely and constructive feedback. In spite of this positive response regarding feedback, one wonders how the survey respondents are able to answer this question as far as institutional practice versus that of individual practice. Course evaluations should be designed specifically to address the nature of feedback in distance education in terms of it being timely and constructive.

The final teaching/learning benchmark (Institute for Higher Education Policy, 2000) states: "Students are instructed in the proper methods of effective research,

including assessment of the validity of resources.” In the quantitative survey, the respondents had a mean of 3.87, and 57% (see Table 3) of the respondents answered that they “strongly agreed” or “agreed.” The mean above 3 and majority of the sample indicated that this benchmark was met. In the qualitative phase, none of the interviewees discussed the topic of effective research methods or the assessment of valid resources. An area of confusion that might arise from this benchmark highlights the need for the clarification of whose role it is to provide instruction on research methods, the teacher or librarian? This is an example of the need for teamwork and systems response to student need (Moore & Kearsley, 2005).

In the qualitative phase, an additional theme of teaching theories and methods emerged. The participants endorsed this theme at a rate of 77% (see Table 30). Although this specific topic is not covered in the IHEP benchmarks (Institute for Higher Education Policy, 2000), the participants had a lot to say about teaching methods and theory. They did not discuss the use of a specific pedagogy when teaching online; however, their comments indicated that they have developed a different pedagogy when teaching online versus the classroom. Their views seem to be characterized by student-centeredness and constructivism. They also evidenced sensitivity to non-traditional students and diverse learning styles. Additionally, they also supported the use of multi-media to facilitate communication and learning. This is a significant finding in the examination of faculty issues in distance education, indicating that a significant focus is pedagogical. Not only is this discussion in the qualitative phase of the study, there is also evidence in the literature of the morphing of distance education pedagogy, but it also draws attention to the need to expand faculty support beyond the technical (Bonk & Dennen, 2003; Huang, 2002;

Levine & Sun, 2002). The absence of specific benchmarking relating to theories and methods also fails to extend the push to define an online pedagogy. It is refreshing to see faculty members interested in teaching methods and theories with an emphasis on understanding more about the learning process.

Course structure benchmarks. The survey results demonstrated affirmative mean scores between 3.43 and 4.49 (see Table 4) for the four course structure benchmarks. In the qualitative phase of the study, the course development benchmarks had a low intensity effect size of 1.7% (see Figure 6) and the interviewees spent little time discussing this benchmark.

The first course structure benchmark (Institute for Higher Education Policy, 2000) states: “Before starting an online program, students are advised about the program to determine (1) if they possess the self-motivation and commitment to learn at a distance and (2) if they have access to the minimal technology required by the course design.” The quantitative survey findings revealed a mean of 3.43 and that 44% of respondents gave an affirmative response of “strongly agree” or “agree” (see Table 4) that this benchmark characterized their program. The majority of the sample at 56% (see Table 4), however, did not provide an affirmative response. Seventeen percent did not know, 18% gave a neutral response, 14% disagreed, and 7% strongly disagreed. In the qualitative interviews, none of the participants discussed the issue of assessing for self-motivation or minimum technology requirements. This is an area that individual faculty members could influence through the use of evaluation tools, by interviewing individual students, and through providing student education and information. Institutionally, this could also be

addressed through the use of baseline admission requirements and student hands-on training programs prior to enrollment.

The second course structure benchmark described by IHEP (Institute for Higher Education Policy, 2000) states: “Students are provided with supplemental course information that outlines course objectives, concepts, and ideas, and learning outcomes for each course are summarized in a clearly written, straightforward statement.” The survey results revealed a mean of 4.49; the highest mean score in the survey and 80% of the sample provided an affirmative response that this benchmark was met (see Table 4). Despite this high mean, only one of the participants stated that Internet-based distance education “forces you to be extremely clear.” This may be an instance where necessity is the mother of invention.

The third course structure benchmark (Institute for Higher Education Policy, 2000) states: “Students have access to sufficient library resources that may include a ‘virtual library’ accessible through the World Wide Web.” The survey results revealed a mean of 4.28 and 86% of the sample provided an affirmative response (see Table 4). The participants in the qualitative interviews did not discuss library resources. Residential students are increasingly utilizing web-based library resources as a primary means of literature research requiring colleges and universities to provide and improve on this service whether distance education students are present or not.

The final course structure benchmark states: “Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.” In the quantitative survey, the respondents revealed a mean of 4.07 and 55% of the respondents (see Table 4) answering that they “strongly agreed” or “agreed.” In the

qualitative phase, only 22.2% (see Table 29) of the participants endorsed the theme of course structure. This was an example of a theme that was discussed very little by few participants. One participant did discuss this issue of time expectations within the context of unpleasant past experiences with students turning in assignments late and poor course completion rates. One other participant highlighted her program's practices of being very clear about time expectations with assignments and communication. The interviewees may not have discussed this issue of time expectations extensively because online faculty members have needed to address this issue out of self-preservation. Face-to-face students are accustomed to the instructor's delays in responding to questions and grading from class period to class period. Online students quickly develop the realization that their professors are potentially available 24 hours a day, 7 days a week. If faculty members do not make clear their response intentions, they may quickly become overwhelmed. This increased access to the teacher is one of the elements that participants saw as adding to the intensity and time-consuming nature of teaching on the Internet.

In reviewing these findings, it is also important to highlight that a significant portion of the survey respondents indicated that they did not know the answers to many of the benchmarks. The responses to 15 of the 24 benchmarks indicated that at least 10% of the sample stated that they did not know (see Tables 1-7). Three of the four course structure benchmarks revealed that between 12% and 17% did not know (see Table 4). All of the student support benchmarks showed large numbers of respondents (11% - 34%) did not know (see Table 5). Likewise, all of the evaluation and assessment benchmarks demonstrated significant percentages that selected "I don't know" from 16% to 29% (see Table 7). It can be concluded that there are significant knowledge gaps

among the very individuals (online faculty and administrators) who are in the best position to provide leadership.

Future Distance Education Plans

The survey results found that 77% of the sample (see Figure 2) stated that their institution planned to increase online distance education over the next 3 years while none of the respondents reported an intended decrease. The interviewees' comments concurred and were characterized by a future orientation and an ability to see the potential for distance education. If the problem of institutional neglect in commitment and strategic planning exists to the degree indicated by the interviewees in this study, it begs the question of the extent to which this growth is mission-driven and how it will be supported and sustained without strategic planning.

Importance of Internet-based Distance Education

The survey findings indicated that 54% of the sample (see Figure 3) found Internet-based distance education to be very important to their school's future success. In the qualitative interviews, the interviewees expressed concern regarding lost opportunities if their schools do not capitalize on distance education. The interviewees also discussed issues of competition for shrinking pools of students and financial viability. Even traditional residential students may begin to supplement their course loads with lower-cost general studies courses accessible in online formats. The arguments leveled against distance education often involve the comparison with traditional education in an either-or fashion. The qualitative interviewees in this study focused more on distance education as enhancing the traditional brick and mortar campus, thus helping

to reinforce or supplement, rather than replace, traditional education. As greater consumer demand from students increases, the perspective of importance is likely to become more urgent.

Perceptions of Administrators and Teachers

Two of the study's hypotheses dealt with differences in the perceptions of administrators and faculty on the IHEP benchmarks and the importance of Internet-based distance education. The null hypothesis could not be rejected in response to the question that there is no difference between administrator and faculty perceptions on IHEP benchmarks. Neither could the null hypothesis be rejected regarding the question that there is no difference between administrator and faculty perceptions regarding the importance of Internet-based distance education to the future success of their institutions.

A possible explanation for the lack of variance in faculty and administrators' responses may have to do with a limitation of this study in which survey respondents may have answered questions in order to enhance the image of their institutions. The Adventist educational system is relatively small and competitive. If the respondents perceived that this study would compare practices between campuses, they may have had the tendency to respond more favorably. It is noted that a study (Lee, 2002) has found these differences to exist in regard to various aspects of faculty support. Another explanation could be that the true differences lay in the realm of the institutional-controlled areas versus the faculty-controlled, and that both administrators and faculty are aware of these strengths and weaknesses.

Benchmark Perceptions by Experience and Position

In response to the hypothesis that there is no difference between the levels of experience of administrators and faculty and their perceptions on the IHEP benchmarks, a statistically significant difference was found on the course development benchmarks. When accounting for the dual effect of both experience (number of years in higher education) and the positions of administrator and teacher, the benchmarks on course development were found to have an inverse relationship (see Table 17 and Figure 4). Teachers with the least experience (1-10 years) and administrators with the most experience (21+ years) had mean scores that were more favorable on the course development benchmarks, whereas teachers with the most experience and administrators with the least experience had the least favorable means. Interestingly, teachers and administrators with 11-20 years of experience had almost identical mean scores. It seems that the novice teacher and sage administrator share a brighter outlook on the course development benchmarks. The qualitative interviews did not expand on this finding.

An explanation for this finding might be that younger teachers are entering higher education with greater technological competence and more student-centered approaches; veteran administrators may have a greater vision for educational trends based upon a wealth of past experiences. Teachers with the most experience may be entrenched in the instructivist paradigm, while the least experienced administrators may be adapting to the higher education old-boys network. Teachers and administrators with mid-level experience might exemplify a group with a foot in both paradigms.

Role Identification by Position

When viewing the findings on the differences between administrator and faculty perceptions regarding their roles in visioning, strategic planning, and policy-making, it was found that the vast majority of the teachers surveyed (over 70%) did not see themselves in the roles of distance education visioning, strategic planning, and policy-making (see Tables 10, 11, & 12). Conversely, it was surprising to find how many administrators also did not see themselves in the same roles, with 31% (see Table 10) who did not identify with the role of vision, 41% (see Table 11) did not identify with the role of strategic planning, and 37% (see Table 12) did not identify with the role of policy-making.

Although the study did not intentionally seek to identify the views of mid-level administrators, it was possible to identify via survey responses a unique hybrid of administrators who also had online teaching experience that were classified as administrator/teachers. More often than not, these individuals were deans, chairpersons, and directors who also taught. When including their perceptions regarding role identification, the study found that a higher percentage of administrator/teachers identified with the roles of visioning, strategic planning, and policy-making than upper administrators did in all three categories (see Tables 13, 14, & 15). The qualitative results found that six of the nine identified experts were administrator/teachers. Their stories reveal a tale of pioneering online distance education in their departments despite the lack of support and commitment from upper administration. These findings beg the question, Who is leading the distance education effort at the institutions studied? Finding so many

administrator/teachers among the experts may allow us to conclude that deans, chairpersons, and directors are the campus change agents.

The findings on role perceptions give a sense of the need to redefine distance education leadership, and where the source of this leadership ought to be. The expertise of the online teaching faculty is needed at this point in the evolution of Internet-based distance education because of its infancy and the need for organizations to learn from their experiences. Their role as mentors could prove to be an effective means of developing a learning organization. Administrators, on the other hand, are expected to cast vision and provide leadership; by their own admission, many do not view themselves in this role. The qualitative interviewees also point to this as problematic. Administrative neglect has produced failed and half-hearted distance education initiatives that leave innovative faculty members unsupported.

The finding that administrator/teachers identify more strongly with the roles of visioning, strategic planning, and policy-making is believed to be an explanation for pockets of success in the nine schools studied. Those institutions offering full degree programs can likely find their success traced back to specific individuals who are deans or chairpersons. These individuals possess enough authority to make departmental decisions regarding distance education, as well as the perseverance to succeed in the face of administrative opposition. Their experiences could offer a wealth of learning and leadership across their campuses and to the entire North American Adventist distance education system.

Teaching Compensation

A hypothesis regarding faculty compensation was developed with an intuitive sense that compensation and the ability to moonlight for other schools was a significant issue in distance education; however, the qualitative findings shed more light on the issue of remuneration and loading than the quantitative findings. The quantitative data did show that the majority of faculty at 62% (see Table 18) who were not compensated additionally for their online teaching either had been moonlighting or considered moonlighting versus 49% of the faculty (see Table 18) who were paid additionally for their online classes; however, this margin is relatively small. The qualitative findings revealed significant discussion on the issues of remuneration and faculty loading; however, the concern seemed more in terms of the desire to have more time via loading than money. The issue of loading may be the single most important faculty issue to attend to in order to expand professional development in the use of educational technology and online teaching scholarship because it affords time and reward for their efforts (Bonk & Dennen, 2003; Wilson, 2003; Wolcott, 2003).

Unexpected Findings

Although this study was not gender focused, an unexpected finding was the differences in perceptions on the benchmarks between men and women. All of the benchmark means were higher (see Table 23) for women, indicating more favorable responses. Statistical significance was found on the basis of gender for the benchmarks of: course development, teaching/learning, course structure, student support, and evaluation and assessment (see Table 23). Reasons for the gender differences are speculative, and may be explained by traditionally formed gender roles of women being

more nurturing, while men are more authoritative. The more feminine trait of nurturing might be more congruent with a constructivist, student-center model, while the more power-oriented masculine role is more congruent with the teacher-centered model. One study (Wilson, 2003) found women to be higher utilizers of faculty support services and used the example of the stereotype of men not wanting to ask for directions as an explanation. Loss of control and autonomy and the willingness to collaborate and seek assistance may be the traits needed in distance education (Truman-Davis et al., 2000) and are traditionally defined as more feminine qualities. Another explanation may be that female educators may view adult women as key consumers of distance education and sympathize with the barriers they face in accessing higher education. Clearly, this is an area in which further research is required.

Additionally, three qualitative themes emerged beyond the *a priori* benchmark categories. These themes were prevailing attitudes in distance education, collaboration, and qualities of the expert. Prevailing attitudes represented two categories of the brick and mortar and brick and click mentality. These attitudes demonstrate two educational paradigms of current thinking. The brick and mortar is the traditional teacher-centered, face-to-face model and viewed as the superior form of course delivery. The brick and click is the non-traditional, student-centered approach to education that promotes the use of technology in higher education. The theme of collaboration highlighted the barriers that were a result of institutional competition and the numerous opportunities to collaborate. The literature is filled with references to the constructivist, student-centered orientation that values collaboration as qualities that are exemplified in distance education (Diaz, 2000; Huang, 2002; Sammons, 2003; Wilson & Brent, 2000).

Lastly, the theme of qualities of the expert revealed a composite of qualities that described individuals who are risk-takers, early adopters, humble, technologically competent, passionate, enthusiastic about the potential of educational technology, and mentors. This synthesis of qualities may provide organizations with a view of the individual talents needed to lead distance education change. Truman-Davis et al. (2000) described the faculty who adapt most successfully to distance education. These traits include: motivation; willingness to give up some control; the ability to collaborate; open to role change; the ability to learn from others; patience with technology.

Summary

In summary the overarching questions in this study were to examine quality and to better understand issues identified by teachers regarding their experiences with Internet-based distance education. Although many things were learned throughout the study, the overview gained was that the issues that are within the control of the faculty seem to be positive often due to the diligence of individual faculty members and departments. However, the institutional systems that support the health of a distance education program have shown greater weaknesses. Areas of particular concern are: the lack of institutional commitment and strategic planning, faculty loading and remuneration, faculty support, training and mentoring. The faculty needs to challenge ineffective teaching/learning paradigms and better understand the attributes of students that are compatible with specific models of teaching. Distant students also have a great need for support and training and should be assessed for minimum skills both technical and the self-directedness needed to perform in a virtual environment. Greater attention

also needs to be given to training students in electronic research methods. Evaluation and assessment are vital to gaining insight into the effectiveness of these system-wide efforts.

Traditionally, excellence in higher education has been built upon the foundation of teaching excellence from a committed and knowledgeable faculty. Distance education has cast a new light on higher education that demonstrates the adage that it takes a village to raise a child. It takes much more than an excellent faculty to teach a student from a distance—an entire village of committed administrators, faculty, staff, and students is needed to develop a high-quality course, to teach a meaningful class, to offer a degree program, and to conceive of an institutional plan for distance education. It all starts with a vision that the whole is more than the sum of its parts.

Recommendations

Based upon this study's findings, I offer the following recommendations for practice and research.

Recommendations for Practice

Recommendations for Faculty

1. Instructors should assess their students for self-motivation and minimum technology needs and skills prior to enrollment.
2. Teachers should utilize every opportunity to provide leadership to administration and to seek support from peers involved in distance education.
3. Encourage discourse regarding teaching methods and theories that support high-quality Internet-based distance education.

Recommendations for Administrators

1. Considering the view that Internet-based distance education is seen as important and will increase in the future on the campuses of the nine schools studied, there is an increasing need for administration to consider how distance education ties to institutional vision and mission and to strategically plan for the congruent use of educational technology and distance education.

2. There is a need for systematic evaluation and assessment of the effectiveness not only of individual distance courses but also entire programs.

Recommendations for Administration That Impact Faculty

1. The issue of faculty loading and remuneration needs to be addressed in order to account for the added time demands of online course development and teaching. For those faculty members who hold full-time face-to-face class loads, the added online course may compromise the quality of their traditional and distance teaching.

2. Faculty members need to be supported in the effort to make the transition from classroom to online teaching. Technical and pedagogical assistance are needed for successful transitions, as well as the mentorship of experienced online teachers.

Recommendations for Administration That Impact Students

1. Student support is needed in proper electronic research methods and hands-on training.

2. Examining the issue of access to higher education by marginalized and non-traditional students may be a particularly pertinent application of distance education programs.

3. Ensure that high-quality technical support is available to students enrolled in distance courses and that this support is timely and accurate.

Recommendations for Research

1. There is a need for greater examination of the teaching models that facilitate successful distance education and the student attributes that complement these models.

2. The effectiveness of models of faculty support on faculty technology use may also give institutions insight into ways that faculty learn best.

3. Further research is needed regarding the issues of remuneration and faculty loading in order to learn more about the impact of time and money on the quality of teaching and faculty willingness to become involved in distance education.

4. Further research is needed to learn more about gender differences that exist in the perceptions of Internet-based distance education.

5. The IHEP benchmark survey needs to be tested for validity and reliability.

6. Specific areas of the IHEP benchmarks requiring re-examination pertain to the areas of online teaching methods and theories, institutional strategic planning, and faculty loading and remuneration.

Closing Comments

In closing, it was enriching to learn from the experiences and insights of the participants in this study. It seems that there are numerous enthusiastic and innovative

teachers at the schools studied who are the glue that hold many of these programs together. The concern is that these teachers cannot indefinitely bear the burden of unstable distance education systems. This leaves one to wonder what will happen to them and their distance education programs in the future. One thing seems clear, that without administrative vision, commitment, and strategic planning, some of these instructors will leave or their enthusiasm will turn to apathy. Those schools that manage to harness administrative support and promote faculty development will capitalize on untapped sources of success.

In terms of the art and science of teaching, the teachers in this study have the potential to ignite their campuses with rich conversations about teaching and learning. This is a prime opportunity to underscore the need for greater pedagogical knowledge in higher education. This dialogue may serve to deepen and clarify core principles of good teaching and learning, which is what higher education is all about.

APPENDIX A
SURVEY AND INTERVIEW PROTOCOL

Electronic Survey
Benchmarks for Quality Internet-based Distance Education

I. Participant Agreement and Purpose

Participant Agreement: As this is an online survey, completing and returning the survey will constitute your consent to participate in this research study. Your participation is voluntary and individual and institutional confidentiality will be assured in the analysis and reporting of all data. There are no known risks for participating in this study.

Purpose: The purpose of this survey is to provide better understanding of the status of Internet-based distance education in Seventh-day Adventist colleges and universities in the North American Division. It is our belief that the results of this study will be important and timely to SDA higher education. Questions have been adapted from research done by The Institute for Higher Education Policy (2000) and are being used with permission.

Definition: This survey focuses solely on distance education delivered via the Internet. Online or Internet-based distance education is defined as any course where the primary means of delivery of course instruction and materials are through the use of the Internet.

II. Instructions and Benchmarks

Instructions: Rate the extent to which the following descriptions are characteristic of your institution's Internet-based distance education practices. If you do not have sufficient knowledge or experience relating to a statement, please check the box "I don't know". This survey should take approximately 10-15 minutes to complete. Thank you for being a part of our research.

	<i>Strongly Disagree</i>		<i>Neutral</i>		<i>Strongly Agree</i>	<i>I don't Know</i>
	1	2	3	4	5	
<i>Institutional Support Benchmarks</i>						
1. A documented technology plan that includes electronic security measures (i.e. password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information.	1	2	3	4	5	<input type="checkbox"/>
2. The reliability of the technology delivery system is as failsafe as possible.	1	2	3	4	5	<input type="checkbox"/>
3. A centralized system provides support for building and maintaining the distance education infrastructure.	1	2	3	4	5	<input type="checkbox"/>

***Strongly
Disagree******Neutral******Strongly
Agree******I don't
Know******Course Development Benchmarks***

- | | | | | | | |
|--|---|---|---|---|---|--------------------------|
| 4. Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes ---not the availability of existing technology --- determine the technology being used to deliver course content. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 5. Instructional materials are reviewed periodically to ensure they meet program standards. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 6. Courses are designed to require students to engage themselves in analysis, synthesis, and evaluation as part of their course and program requirements. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |

Teaching/Learning Benchmarks

- | | | | | | | |
|---|---|---|---|---|---|--------------------------|
| 7. Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/or e-mail. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 8. Feedback to student assignments and questions is constructive and provided in a timely manner. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 9. Students are instructed in the proper methods of effective research, including assessment of the validity of resources. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |

Course Structure Benchmarks

- | | | | | | | |
|---|---|---|---|---|---|--------------------------|
| 10. Before starting an online program, students are advised about the program to determine (1) if they possess the self-motivation and commitment to learn at a distance and (2) if they have access to the minimal technology required by the course design. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 11. Students are provided with supplemental course information that outlines course objectives, concepts, and ideas, and learning outcomes for each course are summarized in a clearly written, straightforward statement. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 12. Students have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |

	<i>Strongly Disagree</i>		<i>Neutral</i>		<i>Strongly Agree</i>	<i>I don't Know</i>
13. Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.	1	2	3	4	5	<input type="checkbox"/>

Student Support Benchmarks

14. Students receive information about programs, including admissions requirements, tuition, and fees, books and supplies, technical and proctoring requirements, and student support services.	1	2	3	4	5	<input type="checkbox"/>
15. Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, and other resources.	1	2	3	4	5	<input type="checkbox"/>
16. Throughout the duration of the course/program, students have access to technical assistance, including detailed instructions regarding electronic used, practice sessions prior to the beginning of the course, and convenient access to technical support staff.	1	2	3	4	5	<input type="checkbox"/>
17. Questions directed to student services personnel are answered accurately and quickly, with a structured system in place to address student complaints.	1	2	3	4	5	<input type="checkbox"/>

Faculty Support Benchmarks

18. Technical assistance in course development is available to faculty, who are encouraged to use it.	1	2	3	4	5	<input type="checkbox"/>
19. Faculty members are assisted in the transition from classroom teaching to online instruction and are assessed during the process.	1	2	3	4	5	<input type="checkbox"/>
20. Instructor training and assistance, including peer mentoring, continues through the progression of the online course.	1	2	3	4	5	<input type="checkbox"/>
21. Faculty members are provided with written resources to deal with issues arising from student use of electronically-accessed data.	1	2	3	4	5	<input type="checkbox"/>

***Strongly
Disagree******Neutral******Strongly
Agree******I don't
Know*****Evaluation and Assessment Benchmarks**

- | | | | | | | |
|---|---|---|---|---|---|--------------------------|
| 22. The program's educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 23. Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate program effectiveness. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 24. Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |

III. Demographic Information

25. Institution name: *(drop down box with 9 institutions listed)*

26. Current Position: (choose as many as apply) President, Vice-President –Academic, Vice-President - Enrollment, Vice-President-Financial, Distance Education Director, Information Technology Administrator, ADEC Representative, Department Chair/Dean of School, Professor, Associate Professor, Assistant Professor, Instructor, Adjunct faculty, Facilitator, Other (please specify)

27. Highest degree completed: (check box) Doctoral, Masters, Bachelors

28. Number of years in Higher Education: (drop down box) 1 –5, 6-10, 11-15, 16-20, 21-25, 26-30, 30+

29. Gender: male/female

30. Number of Internet-based courses offered by your institution: (check box) 1 –5, 6-10, 11-15, 16-20, 21-25, 26-30, 30+

31. Do you offer degree programs that are entirely Internet-based? (check box) Yes, No, Not sure. If Yes, which degree(s) are offered: _____

32. In which discipline(s) have you taught an Internet-based course(s)? (check box)

*I have not taught an internet-based course. I have taught an Internet based course in the

following discipline(s): _____ *If you have not taught an

internet based course, please go to question 35.

33. Do you receive additional pay to teach an online course(s). (check box) Yes, No
34. Have you considered teaching online courses for any institution other than the one in which you are currently employed? (check box). Yes, I currently teach for another school. Yes, I have considered teaching for another school. No.
35. What has been your role(s) in regard to the provision of Internet-based distance education at your institution? (Check as many as apply) Course, design, Teacher/Facilitator, System/Technical Support, Visioning, Student Recruitment, Strategic Planning, Policy Making, Obtaining Funding, Other (please specify) _____.
36. Which Internet-based course management system does your institution use? (check boxes) WebCT, BlackBoard, Currently have no system, Not sure, Other (please specify) _____.
37. What are your institution's plans over the next three years regarding Internet-based courses and programs? (Check box) Increase, Decrease, Stay the Same, Don't Know.
38. How important do you think Internet-based distance education is for the future success of your institution? (5 point scale) Not important, Slightly important, Important, Somewhat important, Very Important.
39. Please identify an individual(s) on your campus who you would consider an expert in internet-based distance education. _____
40. Additional comments you might wish to share. (Optional). _____

Thank you for completing this survey. If you have further questions, please contact us or the Chair of our Dissertation Committee.

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Qualitative Interview Protocol

Participants in the qualitative interviews will be selected from the pool of experts identified from the IHEP benchmark survey that asks research participants to identify 1 distance education expert on their campus. One expert from each campus will be interviewed to obtain qualitative data relating to emerging themes and stories of Internet-based distance education. In order to create a pool of 11 experts representing each of the 11 institutions the expert most frequently identified on each campus will be selected for the qualitative interview. My co-collaborator Pamela Cress or I will conduct the 11 interviews. Participants for the qualitative survey will be interviewed in telephone interviews. The interviews will be audio taped and transcribed for analysis. Qualitative interviews will be assigned numbers upon their receipt and names will not be used.

Qualitative interview questions will expand upon the survey data in the quantitative phase of the study. Preliminary questions in the narrative inquiry will focus on the boundaries of time: past, present, and future (Clandinin & Connelly, 2000). These questions are: How did you get into the business of Internet-based distance education? Why are you presently involved? What are the most pressing issues for the future of Internet-based distance education? Additional questions may be developed following the analysis of the quantitative data and will relate to extreme or outlier cases. Each participant in this portion of the study will be asked the same questions.

APPENDIX B
INFORMED CONSENT

ANDREWS UNIVERSITY
Department of Leadership
School of Education
Survey Informed Consent Form

TITLE OF STUDY: Internet-based Distance Education in Seventh-day Adventist Higher Education: An Administrative and Instructional Perspective

Pamela Keele Cress, MSW and Susan Brown Smith, MSW.

PURPOSE: The purpose of this collaborative study is to determine: a) to what extent North American Division (NAD) Seventh-day Adventist (SDA) colleges and universities meet benchmarks for quality Internet-based distance education; b) what administrator and teacher perceptions and experiences are regarding Internet-based distance education and; c) how institutional and instructional benchmarks for quality are being demonstrated.

INCLUSION CRITERIA: I understand that in order for me to participate in this study I must be currently employed: 1) as an administrator in one of the following positions: President, Vice-President for Academic Affairs, Finance, and Enrollment, Directors of Information Technology, Academic Computing, and Distance Education, and Adventist Distance Learning Consortium (ADEC) representative and/or 2) a faculty member with teaching experience in Internet-based distance education.

PROCEDURE: I understand that I will be asked to complete a 10-15 minute online survey regarding Internet-based education in my institution.

CONFIDENTIALITY: I understand that once researchers receive my survey my name will be removed as an identifier and will be assigned a number. Once this number is assigned, I understand that my name will no longer be used to identify survey responses.

RISKS: I understand that there are no known risks for participating in this study.

BENEFIT/RESULTS: I understand that I may not receive any direct benefits from participating in this study. I understand that the results may enhance information regarding Internet-based education in NAD SDA colleges/universities. I understand that the information collected during this study will be included in two doctoral dissertations and may be presented or published in professional meetings and journals.

VOLUNTARY PARTICIPATION

I understand that my participation in this study is voluntary. I understand that I may discontinue my participation in this study at any time without penalty or prejudice. I also understand that there is no compensation in return for my participation.

PARTICIPANT AGREEMENT:

As this is an online survey, completing and returning the survey will constitute your consent to participate in this study. If you have additional questions about informed consent or this survey, please contact the researchers at:

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ANDREWS UNIVERSITY
Department of Leadership
School of Education
Interview Informed Consent Form

TITLE OF STUDY: Internet-based Distance Education in Seventh-day Adventist Higher Education: An Administrative and Instructional Perspective

Pamela Keele Cress, MSW and Susan Brown Smith, MSW.

PURPOSE: The purpose of this collaborative study is to determine: a) to what extent North American Division (NAD) Seventh-day Adventist (SDA) colleges and universities meet benchmarks for quality Internet-based distance education; b) what administrator and teacher perceptions and experiences are regarding Internet-based distance education and; c) how institutional and instructional benchmarks for quality are being demonstrated.

INCLUSION CRITERIA: I understand that in order for me to participate in this study I must be currently employed: 1) as an administrator in one of the following positions: President, Vice-President for Academic Affairs, Finance, and Enrollment, Directors of Information Technology, Academic Computing, and Distance Education, and Adventist Distance Learning Consortium (ADEC) representative and/or 2) a faculty member with teaching experience in Internet-based distance education.

PROCEDURE: I understand that I will be asked to complete a 1 – 2 hour telephone interview regarding Internet-based distance education in my institution. I understand that this interview will be audiotaped for transcription and future data analysis.

CONFIDENTIALITY: I understand that once my interview is completed my name will be removed as an identifier and will be assigned a number. Once this number is assigned, I understand that my name will no longer be used to identify interview responses.

RISKS: I understand that there are no known risks for participating in this study.

BENEFIT/RESULTS: I understand that I may not receive any direct benefits from participating in this study. I understand that the results may enhance information regarding Internet-based distance education in NAD SDA colleges/universities. I understand that the information collected during this study will be included in two doctoral dissertations and may be presented or published in professional meetings and journals.

VOLUNTARY PARTICIPATION

I understand that my participation in this study is voluntary. I understand that I may discontinue my participation in this study at any time without penalty or prejudice. I also understand that there is no compensation in return for my participation.

Participant Signature: _____

Dated: _____

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VITA

100

100

100

Susan B. Smith, MSW

DEGREE INFORMATION

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B.S.	May 1981	Southern Adventist University Major: Behavioral Science Minor: Biology

LICENSURE AND CERTIFICATION

Washington Licensed Independent Clinical Social Worker
Florida Licensed Clinical Social Worker
Certified HIV Counselor

ACADEMIC AND PROFESSIONAL EXPERIENCE

2002 - Present	Walla Walla College School of Social Work Associate Professor College Place, Washington
August 1997 - 2002	Walla Walla College School of Social Work Assistant Professor College Place, Washington
January 1990 – January 1996	University of Miami School of Medicine Adjunct Instructor Miami, Florida
May 1989 – August 1997	University of Miami Jackson Memorial Medical Center Clinical Social Worker Miami, Florida
January 1985 – January 1987	Child Protective Services, State of Tennessee DSHS Social Counselor II Chattanooga, Tennessee
January 1982 – September 1984	Jewish Floridian Newspapers Art Director Miami, Florida